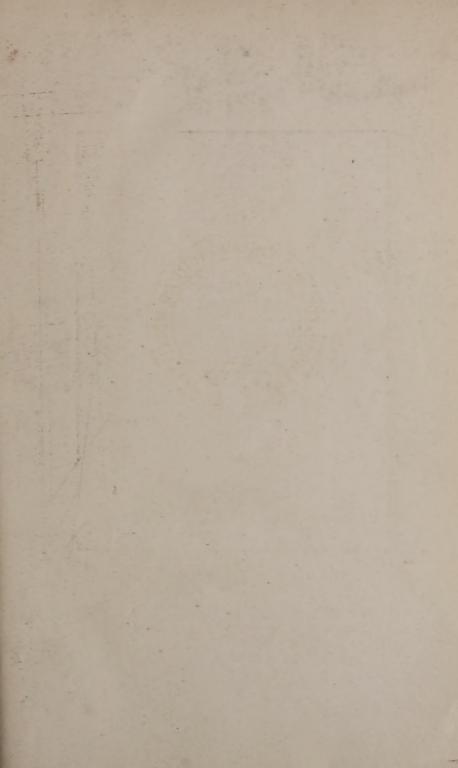
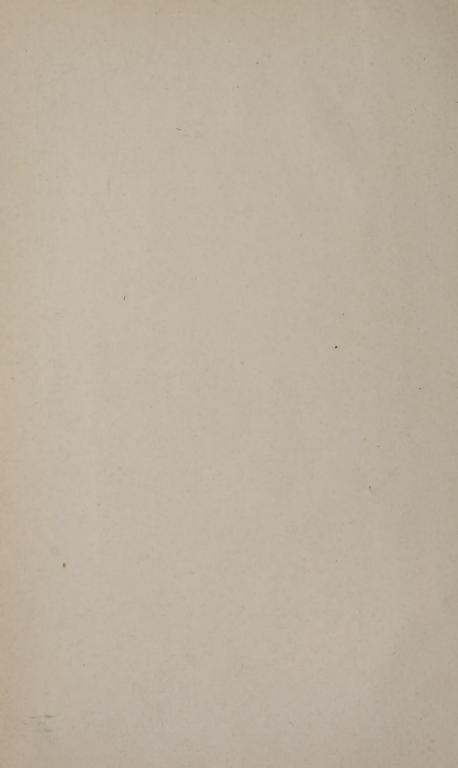


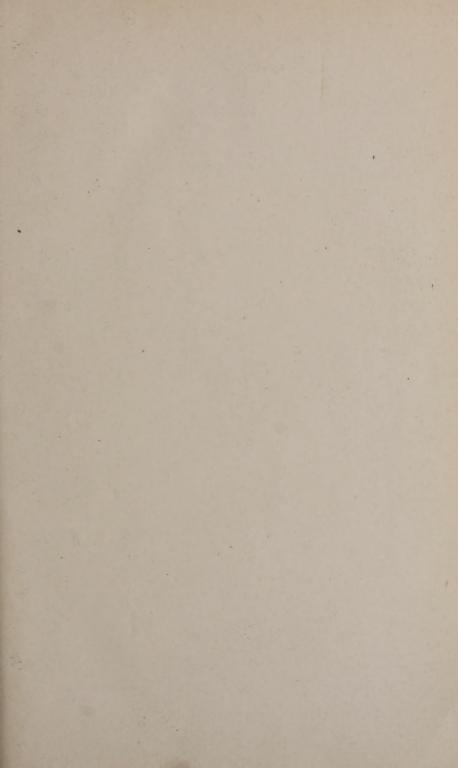
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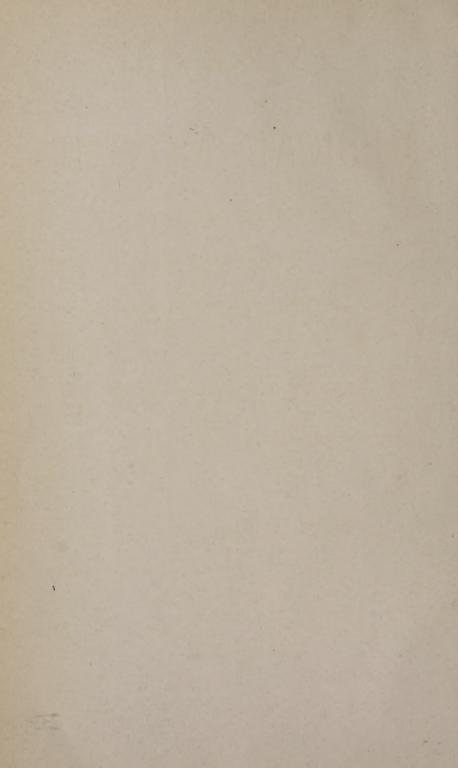


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VIRGINIA

MEDICAL MONTHLY.

(RICHMOND.)

ESTABLISHED APRIL, 1874.

ANNUAL SUBSCRIPTION, \$3.00.

VOLUME XV.

(FROM APRIL, 1888, TO MARCH, 1889, INCLUSIVE.)

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Secretary of the Medical Society of Virginia since its Organization in 1870, Etc.,

EDITOR AND PROPRIETOR.

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RICHMOND:

J. W. FERGUSSON & SON, PRINTERS.

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VIRGINIA MEDICAL MONTHLY.

VOLUME XV—No. 1.

WHOLE NUMBER, 169.

RICHMOND, APRIL, 1888.

Priginal Communications.

ART. I.—Morphinic and True Tetanus—their Etiology:* By C. W. P. BROCK, M. D., Richmond, Va.

The harrowing symptoms of tetanus, with its agonizing sufferings, and the horrible death of the patient are as familiar to each of you as to me.

I only propose to call your attention to some of the more recent observations as to the causes of this malady, both predisposing and exciting, and particularly to the effects of

opium as a predisposing cause.

I shall say nothing regarding the post-mortem appearances, for they are by no means always the same; and the parallelism between them and the post-mortem appearances, in the morphomaniac are, for the most part, wanting, and therefore not to my purpose in this paper. Nor will I have anything to say in regard to the nature and site of injuries that are apt to be followed by tetanus according to the books.

At a meeting of our Society held in January, 1888, I reported a death from tetanus in a morphomaniac who was in

^{*}Read before Richmond Medical and Surgical Society, Feb. 23, 1888.

the habit of using the drug hypodermatically; and I then alluded to the fact that this was the third fatal case of tetanus that had taken place in our community in the last few years in morphomaniacs,—all of them following on the use of the drug hypodermatically.

The foregoing facts excited in my mind the enquiry: Does the opium habit engender such a condition of the sys-

tem as predisposes to the development of tetanus?

I have diligently sought for information on this subject from the books, from the journalistic literature of the day, and by correspondence with some gentlemen of our profession who, in my opinion, were most likely to be informed on this subject; and I find it an almost unexplored field.

It is a well observed clinical fact, however, that the continued use of opium, begets, in some persons, convulsions of a tetanic character—a result which is more apt to follow if the preparation used contains any of the alkaloid known as codeina, which can be produced from morphine artificially.

Brunton, in speaking of the physiological action of opium and its alkaloids, says that they act almost exclusively on the *central nervous system*, and divide the symptoms produced into two stages:—

(1.) Narcosis, due to a paralytic action on the brain, followed by

(2.) Tetanus, due to increased irritability of the spinal cord.

The morphine group is characterized by the prominence of the narcotic stage, while in the codeine group, the tetanic stage is more prominent, and the narcosis less so. I append the classification:

Morphine Group. Morphine. Oxydimorphine. Codeine Group.
Papavarine.
Narcotine.
Codeine.
Thebaine.

Brunton says that the codeine group becomes closely allied by its last members with the strychnine group; and you are all aware how closely the symptoms of strychnine poisoning resemble those of tetanus.

Morphine is the preparation of opium used by morphomaniacs almost to the exclusion of all others; and it is impure in proportion to the presence of other alkaloids. Now if the unfortunate victim should use an impure article of morphine, a set of symptoms might be developed which, without any history of the case, might be diagnosed as due to strychnine poisoning, or set down as a case of tetanus. The differential diagnosis—without any collateral facts of the case—would be exceedingly difficult to make. During the past summer, a case was reported to me of convulsions both severe and persistent, following the use of morphine hypodermatically for the relief of neuralgia.

It has also been observed that the sudden withdrawal of the drug from the morphomaniac is sometimes followed by convulsions; and so apt is this to be the case, that the gradual withholding of the opiate is the plan pursued in the treatment of the opium habit. This is probably due to the fact that the narcotic effect of the opium, with its paralyzing influence on the brain, disappears more rapidly than the irritability induced in the cord by the drug; and the tetanic symptoms—which had hitherto been held in abeyance—now assert themselves, and we have the tetanic explosions.

Dr. Phillips, of Westminster Hospital, London, reports three cases of complete tetanic rigidity, with opisthotonos, lasting from twelve to forty-eight hours following the use of opium. Several other observers have reported like results, which can only be explained by the known physiological action of the drug, and not upon the plea of the idiosyncrasy of the individual.

If in addition to the tetanic tendency induced by opium, (and I think this will be admitted by any one who will investigate the subject,) you add the enfeebled condition of the entire system consequent upon the same cause, its powers of resistance far below par, etc., you have engendered a condition in the human body that easily succumbs to the invasion and attack of the tetanus bacillus.

According to Nocard and Brieger, tetanus is a disease transmitted to men and animals by the agency of a pathogenic

organism which infects wounds or other suitable soils on the surface of the body. The organism does not penetrate far beyond the limits of its point of inoculation, but exercises its deleterious influence by means of certain products of an alkaloid nature, and of which there are, according to Brieger, four kinds-tetanin, tetano-toxine, spasmo-toxine, and another not named. These alkaloids have a special affinity for certain parts of the motor nervous system, causing excessive discharges of nervous energy, on which the muscular spasms are directly dependent. Nocard found that dried blood and pus scraped from instruments used to geld horses (all of which died of tetanus), when inoculated beneath the skin of rabbits and guinea pigs, caused tetanus; and yet infusions made from the medulla oblongata and spinal cords of animals dead from tetanus were not capable of causing tetanus in other animals into whom some of the infusion was injected.

The conclusion drawn is that the spinal cord and medulla are acted upon by a strychnine-like substance—incapable of cultivation, but derived from the multiplication and growth

of organisms elsewhere existing.*

Carle and Rattone had a case of tetanus resulting from an acne pustule. They inoculated 22 rabbits with the contents of the pustule, and 11 of them died of tetanus. These experiments proved that tetanus was an infectious disease, and that it was possible to infect animals. These results were published in 1884.

In the same year, Nicolaier, working under the direction of Prof. Carl Fluegge, Professor of Hygeine in Gottingen, discovered that ordinary garden earth introduced under the skin of mice, rabbits, guinea-pigs, etc., produced tetanus. Nicolaier took some of the secretion from the wounds he had made in the skin of the animals that had died of tetanus, and inoculated it into test tubes containing blood serum. In a few days this blood serum was found, upon microscopic examination, to contain fine bristle-like bacilli, many of them with a knob on the end. He took traces of this blood serum, and produced typical tetanus with them. Moreover,

^{*}See Med. Record, January 21, 1888.

he inoculated other tubes from the first tubes, and carried on a row of *cultures* in this way. All of these cultures were found to be virulent, a trace of any of them being sufficient to produce tetanus in various animals when inoculated under the skin.

In 1886, the surgeon, Prof. Rosenbach, of Göttingen, had a fatal case of tetanus in a peasant, who had had both feet frosted and gangrenous. He was able to get tetanus by inoculation from this case, in a large number of animals, and also made cultures from the line of demarcation. The cultures which Rosenbach obtained from his patient, and from the animals inoculated from his patient, and from one culture to the next, all agreed with Nicolayer's cultures—the same narrow bacillus, many of them with a knob. Rosenbach read his paper before the Surgical Society in Berlin, in 1886.

The results obtained by Beumer, of the University of Griefswald, correspond with those obtained by Nicolayer and Rosenbach.

In an exhaustive paper on tetanus neonatorum, accompanied by a lot of experiments, he comes to the conclusion that tetanus neonatorum is due to the bacıllus of Nicolaier and Rosenbach, and that the midwives inoculate the children with the filthy rags with which the navel is dressed.

(1) He inoculated animals with bits of navel from a child which had died of tetanus, and got the bacillus in cultures. The animals died of tetanus. (2) He took the secretions from a small wound on the foot of a bare-foot boy, who had died from tetanus from getting dirt in the wound, and got the same results as from the navel. (3) A man got a splinter under his nail from a ten-pin alley, and died of tetanus. Beumer (a) took some splinters from the alley, and inoculated mice, etc., with them. (b) He then took splinters and scraped off the dirt, and inoculated other animals with the dirt. Both sets of animals died of tetanus. He took some of the splinters, after being carefully cleaned, and inserted them under the skin of animals, and the animals lived. This proved that the dirt contained the virus—i. e., the bacillus.

As bearing on this subject, I extract some translations made by Dr. M. D. Hoge, Jr., of this Society, from the *Virginia Medical Monthly*, January, 1888 (page 790):

"Is Tetanus an Infectious Disease?—Dr. Amon (Schmidt's Jahrbuch, 1887-9—Rundschau, Dec. 1, 1887) was called on August 23d to attend a workman who had cut his finger very badly in a feed machine. It was not necessary to amputate; so he was treated conservatively, with the most strict antiseptic precautions. The general condition of the patient was good, and the wound healed well until August 28th, when on that evening violent tetanus and trismus set in, followed in twenty four hours by death. The following day Dr. A. was called to attend a difficult case of labor, in which the placenta had to be removed by artificial means. The woman did well for ten days, when she was attacked by acute tetanus and trismus, and died five days later. On account of the rarity of tetanus in general, and especially puerperal tetanus, Dr. A. believes that, in spite of careful disinfection, he carried the germs of the first case to that of the second.

Experiments on the Etiology of Tetanus.—Drs. Rattone and Carle reported to the Med. Acad. in Turin (Rundschau, Dec. 15, 1887): Towards the end of 1886 a patient died of tetanus in the Hospital of St. Maurice, in Turin. Two hours after death the initial lesion and some of the surrounding tissues were cut out, from which a watery emulsion was made. One month later the fluid was examined, and found to contain large numbers of bacilli and cocci. Twelve Guinea pigs were injected in various organs (nerves, muscles and spinal cord), all of which, with one exception, died in from six to eight days, with all the symptoms of tetanus. From these animals pieces of the ischiatic nerve and spinal cord were taken out, and again an emulsion made. Some of this fluid was injected into other Guinea pigs, and all died of tetanus. In order to make these experiments distinctive, animals were injected with putrid and septic matter and strychnine, which gave entirely different symptoms at death. The experimenters conclude that—(1), tetanus is an infectious disease; (2), an animal can be inoculated from a human being; and (3), it can be transmitted from one Guinea pig to another."

A number of other observers have cases reported to show that tetanus is infectious.

Ferrari contends that a coccus, and not a bacillus, is the cause of tetanus, and he has produced it by inoculation.

Beumer produced tetanus very often with dust, dirt, and old rags; so that there can scarcely be any doubt that tetanus is due to inoculation with the bacilli contained in the rags, etc.

Bacteriologists have observed, in addition to the knobbed bacilli (already spoken of), another smaller bacillus in the cultures; this second bacillus is supposed to be necessary to prepare the way, as it were.

If the rags, earth, dirt, etc., are sterilized by boiling, they do not produce tetanus, and bacilli do not grow in the ster-

ilized article, etc.

I believe that so-called idiopathic tetanus is due to the action set up by the bacilli. They enter the human body either through the air passages or by the mouth, and find somewhere a breach of continuity, and the pabulum necessary for their life and multiplication, and tetanus is developed, though no wound is visible; and I feel sure that in the near future reports will be made of the production of tetanus in animals by inoculation from so-called idiopathic cases. This is very reasonable when we consider that the water we drink, the air we breath, and the food we eat, and the earth under our feet, are all teeming with bacilli, and that a breach of continuity as small as that made by the prick of a needle, affords a lodgment for the bacilli, where they multiply and replenish. And if from any cause the system is below par, and the ability to throw off the invaders is wanting, tetanus may be developed. We call it idiopathic because we do not see, and are unaware that any wound or rent exists in any of the internal organs.

While it is clearly proven, from the foregoing experiments, that tetanus is an infectious disease, and of bacterial origin, it must not be forgotten that the power of resisting inoculation is much greater in man than in animals; and we do not know that the action of microbes is the same on man as on animals. Proof on this point awaits the crucial test of human inoculation, and the observation of the action of microbes on the human body.

The Weekly Medical Review puts it thus: "Throughout our lives there is a constant miniature battle in progress within

our bodies—the elements of health waging fierce warfare on the microbian elements of disease. When in perfect health, the body-cells are successful in the contest, destroying the injurious microbes as fast as they enter; but let some condition impair the vigor of these cells—our body-guards—or introduce some microbe with which they are unable to cope, and the stream of battle turns about, and disease is ram-

pant.

These cells, possessing the power of absorbing and digesting microbes, are called by Metschinikoff "phagocytes," and are not destined for the destruction of microbes alone, but. also for the absorption and removal of dead and degenerate tissue. Metschinikoff has made researches on transparent animals, such as daphnea, which are often invaded by spores of the yeast family. These spores, after entering the intestines with the food, escape into the body of the animal, when a struggle to the death begins between them, and the white corpuscles, which, singly or in groups, absorb and destroy the spores, thus saving the life of the daphnea. Metschinikoff claims that essentially the same struggle is forever continuing in the body of man, only on a more complicated scale, and divides our standing army of protective cells into "microphagi" and "macrophagi."—(Med. Record, Feb. -. 1888.)

What are the deductions, from the foregoing, as regards the three deaths alluded to as occurring in our vicinity? I think it fair to conclude that they may have been due either to—

(1st) *True tetanus*, established by the use of a foul syringe, or a filthy solution of morphine—either or both of them being contaminated by the presence of the pathogenic germ on which tetanus depends;

Or (2d) to the effects produced by the continued use of an impure article of morphine, rendered impure by the presence of one or more of the tetanous group of alkaloids, the action of which on the spinal cord produces a set of symptoms that are scarcely—if at all—distinguishable from true tetanus.

I wish to make my acknowledgments to Dr. Meade Bolton, of Johns Hopkins Hospital, for some of the bacteriological facts contained in this paper.

ART. II.—Etiology and Treatment of Tetanus.* By M. A, RUST, M. D., Richmond, Va.

To the comprehensive and instructive paper of Dr. Brock scarcely anything can be added. I only propose to make a brief summary of the state of our knowledge regarding the

etiology of tetanus.

Dr. Brock, in the cases reported by him, logically refers to the hypodermic needle as the carrier of infection. such an agency of the hypodermic needle be a fact, it certainly is a fact of rare occurrence, whilst the production of abscess, suppuration or erysipelas by the agency of the same needle, is a fact of every day occurrence. It is a matter of common observation that tetanus may arise in sequence of a rusty nail or splinter, soiled chips and odds-and-ends being trodden into the foot, or thrust into the flesh of other parts of the body; of injuries from finger-nails, claws, teeth, pricking or cutting tools, instruments, etc. On the other hand, the same objects, under similar conditions, produce, in the generality of cases, no ill effects besides the solution of continuity; in a considerable number of cases, suppuration, abscess, erysipelas, etc., and especially—perhaps once in 10,000 times—tetanus. Lacerated wounds may likewise, in the same exceptional manner, give rise to tetanus. is no need to go far ahead in search of an explanation. A lacerated wound is generally a wound contaminated by the object which produced the laceration.

Some time ago the supposition arose that tetanus, like other calamities which befall the wounded, was the result of the action of an organism from without, particularly from dust and dirt. In 1884–85, Nicolaier, with the co-operation of Fluegge, succeeded in discovering this organism in common

^{*}Made before Richmond Medical and Surgical Society, Feb. 23, 1888, in discussing Dr. Brock's paper—Article I of this number.

earth. The organism, being rod-shaped, is a bacillus, not a coccus. Out of eighteen specimens of dirt, fetched from far and near, from forests, fields, gardens, roads, streets, yards' floors, etc., inoculated into rabbits, Guinea pigs and mice, twelve specimens produced tetanus in those animals. Cultures of these bacilli likewise produced tetanus seventy-two times out of eighty-one inoculations. The time of incubation is from two to five days. Pure cultures have not, till now, been obtained. The bacillus of tetanus is always met in company with various species of cocci of suppuration and bacteria of putrefaction. Rosenbach, in 1885, succeeded in transferring tetanus from man to rabbits, Guinea pigs and mice. Cultures of these baccilli, through many generations, likewise produced tetanus. From these cultures, Brieger (in 1886) extracted an alkaloid or ptomaine, to which he gives the name of tetanin. It has the formula, C₁₃ H₃₀ N₂ O₉. Injected into the tissues of live animals, this alkaloid produces all the phenomena of tetanus.

Unlike the micrococci of septicæmia, etc., which invade the whole body, and are found in distant organs, the bacillus of tetanus is only met within, at and around the original wound; it does not invade the whole body; matter for inoculation must be taken from this wound; when procured from other organs, from muscles, nerve trunks, spine, etc., it proves ineffective.

These are the facts; at present they only rest on experiments upon animals, and leave our bacillus of tetanus, for the time being, with a somewhat problematic character. He has still to strive for that public recognition which is universally bestowed upon others of his fellow-microbes, on bacillus tuberculosis, bacterium anthracis, micrococci of suppuration, etc.

As no invasion of the body ensues—as the formation of the poisonous alkaloid, out of the elements of the albumen of the tissues, only takes place in the original wound whence the poison is absorbed—we should conclude that this poison called tetanine would be the sole originator of tetanus. On the other hand, as it appears that this poison never forms without the presence of the bacillus, the claim of this microbe to the authorship of tetanus is worthy of consideration.

Before a final conclusion can be arrived at, two conditions must be fulfilled—1st, the respective researches and experiments made by the few must be confirmed by the many; 2d, it must be shown that wherever there is tetanus, there is the bacillus also, just as was proved in regard to tuberculosis, splenic fever, suppuration, etc.

Now, supposing these proofs adduced—as in all likelihood they will be ere long—the pathology of tetanus will not find itself enriched. In none of the animals which succumbed to tetanus could any anatomical lesion or alteration be found. We may perhaps gain a negative advantage by the relinquishment of sundry theories, as "ascending neuritis," and the like, and regard tetanus as the result of an alkaloid poison. In a distant future, advanced chemistry may discover the antidote capable of following the trail of the direful poison. In the near future, however, in whose antechamber we are standing, we shall have recourse to the means, into which all materia medica is fated to resolve itself—prevention!

ART. III.—Non-Puerperal Acute Metritis. By A. F. KERR, M. D., Williamsville, Va.

There is the greater reason for publishing a report of this case from the fact that the existence of acute metritis, assuming the diagnosis to be correct, apart from the parturient state, is denied by many eminent writers on Gynecology. Wenzel says the condition is a figment of the imagination; Dupascque is sceptical; Kleb, up to 1864, had never seen a case in which a positive diagnosis was possible. Emmet writes in the last edition of his valuable work, "Inflammation of the uterine body never occurs except after parturition." (Pepper's System of Medicine, Vol. IV, p. 447).

Reasoning from analogy, it would seem that there is no

satisfactory reason why the uterus should not be a point for the development of acute inflammatory processes. It is certainly one of the most active organs of the female body. It is abundantly supplied with blood vessels and nerves, and all the conditions necessary to the production of inflammation exist in its structures, and during some thirty or more years of woman's life the uterus is in an almost constant state of excitement and activity.

Given then, a congested organ, a depraved condition of the vital forces with toxemia, as in the case under consideration, menorrhagia, continued exposure to severe cold without sufficient clothing, wet feet, hard labor, disregard of hygienic rules, and we have all the elements essential to the production of an inflammation; and why should not this inflammation be a metritis as well as a cystitis, para-or peri-metritis or pneumonitis? Is there anything in the location, anatomical structure or functions of the uterine body to give it immunity from acute inflammation? I think not.

I am aware that I may be charged with egotism in assuming to differ with such eminent specialists as I have mentioned, but the fact that they have never seen a case of acute metritis, does not disprove the existence of the disease. Indeed, specialists in gynecology have to do mostly with chronic diseases. It is the general practitioner, the family physician, who sees disease in its acute form. Besides, there are many specialists equally eminent, who unhesitatingly assert the occurrence of the disease beyond doubt or question, and from recent experience I prefer to place myself in line with the latter class; and I believe the clinical history of this case, will verify the diagnosis, which, I may add, was made at the patient's bedside before reference was held to the literature of the subject.

Case—Belle P, single, æt. 26 years, a servant girl, of very low parentage, but raised in a respectable family, retaining, however, her individuality, had never profited by her superior advantages. She had enjoyed apparent good health, until some months prior to her present illness, when she complained of being broken down. She menstruated regularly until about January 1st, 1888, when her monthly

period returned one week later than usual, lasted one day, ceased for two days, reappeared and continued without intermission until her death, January 29th. The flow was rather profuse, but she continued her daily duties, complaining all the while of pains in sacral region, and of general debility, until January 24th, when on returning from the field where she had gone for turnips, in crossing a fence, she was thrown by a turning rail to the ground. She landed on her feet, and immediately felt a distinct jar, and an increase in the vaginal discharge, with severe pains in the sacral and pelvic region. The hæmorrhage and pain continued to increase, and that night marked chilly sensations were experienced.

I was called to see her the following morning. I found her sitting up, suffering excruciating pains, which she located in the regions above mentioned. She also complained of muscular soreness and tenderness, with stiffness of the joints, and pain on motion; her features were pinched and haggard, indicating intense suffering, the skin presented a vellowish green appearance, pulse 120, temperature not taken but elevated, extremities cold, tongue heavily coated with a dark brown fur; there was no cough, but a profuse secretion from the mouth and throat, of a thick tenacious mucus tinged with very dark colored blood, mouth dry and parched, teeth covered with sordes and breath offensive. was some nausea and occasional vomiting, bowels constipated, urine scant, and urination painful, menorrhagia profuse, the cushion on which she sat being saturated and large blood clots on the carpet beneath her seat, the discharge having almost the color of tar. The lower part of her abdomen was swollen and tender, the vagina hot and throbbing and very sensitive. The cervix soft and tender, the body of the womb swollen and anteverted. The treatment was directed toward the relief of pains, for which opium and camphor combined with calomel were given—the bowels to be opened the following morning with oil. Absolute quiet in the dorsal decubitus was enjoined, and warm applications to abdomen were ordered. Cotton tampons saturated in a solution of alum were introduced into the vagina, quinine was given to counteract fever, and an exclusive milk diet constituted in the main the treatment. There was, however, but little alteration in the symptoms except in the vaginal discharge which was much reduced in quantity, and the relief of pain by the opiates. There was developed the day following my first visit a violent catarrhal conjunctivitis in

right eye. Death ended her sufferings on January 29th, which event was preceded for 18 hours by stertorous breathing and coma.

That the reader may observe the striking similarity between the symptoms given above, and acute metritis, I will here furnish a synopsis of the symptoms and diagnosis as laid down by Jaggard in his article in Pepper's System of Medicine (vol. iv, p. 448 et seq.) He says, "the attack is usually ushered in by a chill, followed by elevation of bodily temperature, a symptom which is apt to persist throughout the course of the disorder. Pain referred to the lower portion of the abdomen and sacral region, is constant *

* Tenderness on pressure, indicating involvement of the perimetrium, is marked. * * Urination is frequent and painful. * * Profuse menorrhagia may occur."

"Diagnosis: "The more or less sudden occurrence of a chill, fever and localized pain and tenderness. * * * * The uterus is exquisitively painful upon the slightest touch." "It is enlarged and softened, resembling in its consistence

the organ in the early month of pregnancy."

As to the possible cause of the metritis in the case I have reported from the history of the case, and the clinical features observed during the patient's illness, there seems but little room for doubt, that overwork, constant exposure to cold and wet, with insufficient clothing, total disregard of hygienic laws, taken in connection with an inherited depravid vitality, had produced a morbid condition of the system—a blood dyscrasia or septicæmia—resulting in menstrual irregularity and subsequent menorrhagia. This condition would possibly have continued an indefinite length of time, had not the accident which occurred five days before her death given vent, so to speak, to the smouldering embers that needed only a spark to light up an acute inflammation.

Of course the possibility of pregnancy entered as a factor into the diagnosis, but the case was carefully watched for such signs, the possibility of its existence stoutly denied, and other circumstances in connection with the history led me to exclude abortion as an exciting cause.

An autopsy would have cleared up all doubts, and led to an absolute diagnosis, but country people are, with few exceptions, not sufficiently educated to appreciate the importance of post-mortem examinations, and indignantly cry out against multilating the bodies of their friends, regarding such procedures as a relic of barbarism. Hence, in this case, there was no autopsy.

ART. IV.—Address Delivered before the Alumni Association of the Long Island College Hospital, on the Occasion of the Eighth Annual Dinner, March 8th, 1888. By J. LEON-ARD CORNING, M. D., New York. Consultant in Nervous Diseases to St. Fransis Hospital, Fellow of the New York Academy of Medicine, etc.

Mr. President and Gentlemen:-It is with great pleasure that I rise to respond to the toast "Scientific Medicine," and that I find myself in this company of gentlemen who are connected with an Institution which has done so much for the advancement of scientific medicine in times past, and is no doubt in the future destined to do still more in that direction. I recall to mind, as I stand here, the fact that this Hospital, the "Long Island College Hospital," was the first to combine demonstrative teaching with the ordinary didactic lectures, and thus it constitutes a worthy example to the medical teaching institutions of this country. Let me also add that both my maternal and paternal grandfather were residents of Brooklyn, and that our family physician for three generations back was a citizen of this noble city. I can therefore truly say that, as I stand here. I feel not among strangers, but among friends.

In order to thoroughly appreciate what modern medicine means today, we must not permit the mind to revert a few paltry years; but let us rather look backwards two hundred years, and in this wide circle we shall see that the progress made has been not only gratifying, but stupendous.

Not long since I found myself in the Academy of Medicine, and I fell upon a small book (Boyle's "Collection of Remedies," 1692) from which I copied the following unique

prescription: It is entitled, "How to Expel Stone," and has the following somewhat startling recommendations: "Take crab's eyes, powder and dissolve a large proportion of them in good white wine vinegar, and of this let the patient drink till all be expelled." He does not say whether we are to wait until the crab's eyes are expelled, or the stone, but one would think such a prescription horrible enough to expel life itself. At the time that this prescription was written, an organic chemistry had not vet been born. How can we wonder, then, that medical men groped about in quest of remedies very much as Diogenes roamed about the market place of ancient Greece, seeking for one honest man? What wonder that they should have resorted to the vilest stuffs, and have made of them still viler compounds, in the vain quest for something which should conduce to the amelioration of human suffering? What wonder, too, that in those dark ages, when physiol gy was little or not at all understood, and when surgery was but a remnant of Egyptian barbarism,—what wonder that the average man should look upon the advent of the physician very much as does the criminal when the executioner stands without his cell door, waiting to adjust the fatal noose. In those days there was no anæsthesia. When it was necessary to perform great surgical operations, the hapless victim was bound to the operating table, and there he was subjected to the most awful tortures. this way the most formidable operation was performed, and it is no wonder that the hapless victim often perished upon the table.

When we look upon such a spectacle as that, and then turn to the practice of the present day, we may well say that we have made progress. When we think of ovariotomy, and the perfected abdominal surgery which has followed in its track, when we think of the ligature, when we think of antiseptic surgery, and when we pass from these mechanical remedies to that chemistry which has given an ever increasing catalogue of potent principles which like trusty servants are ever at our beck and call ready to serve our purpose in the thousand ills which flesh is heir to, we may well say

that we have made progress. When we look upon the Egyptian mysticism in which medicine of former days was wrapped, and when we turn from that picture to modern physiology with all the resources of the experimental method at its beck and call, we may well say that we have made progress, and that scientific medicine is ours.

In this great country with its thousand and one advantages, amid the great victories which have been fought in the arena of mechanical engineering and other applied sciences, it is no wonder that a corps of surgeons and physicians should have been raised up, than which none better are to be found upon the face of the earth. So long as we have such men as Marion Sims, Austin Flint, McDowell, Atlee, of Pennsylvania, Samuel D. Gross, James R. Wood, T. Gaillard Thomas, and a thousand more unmentioned heroes in the arena of scientific medicine, we need not despair, for we may feel as did the ancient Greeks before entering upon the arena of battle, that the gods are indeed with us. But with all this advance, there has been laid upon us, and particularly upon the younger members of the profession, duties from which we cannot be absolved. Upon us devolves the necessity of furthering that progress with all the strength within us, so that we may be worthy of the immortal dead who have gone before.

It is to such helpful associations as this, that, as individuals we must look for that support which comes from community of purpose, and for that sympathy which springs from a common destiny. It is a good thing for men of like thought and like aspirations to meet together on such occasions as this, and to know each other as by no possibility they can know each other if not similarly brought in contact. The hospitalities of this Board are but a synonym of that larger hospitality of soul which comes from expanded sympathies and lofty purpose. Let us go on, looking ever upwards and onwards, until when the last day shall have come, and our last breath is escaping from our bodies, we may say, as did the immortal Goethe, "More light, more light."

2

Clinical Reports.

Anomalous Ducts of Exit from Parotid Glands in Front of Ear. By D. M. CROSSON, M. D., Lewisdale, S. C.

I ask to report a half dozen anomalous cases (or at least anomalous to me) that I have recently seen, and ask information concerning the same.

I was called to see the children of Mr. D., a very wealthy farmer, six miles distant in the country. I examined his children (four in number), and found that three of them have a small orifice on each side and just in front of the upper portion of the external ear, and that one has only one opening in front of the left ear, and that there is a continuous discharge going on through these orifices all the time. On close investigation, I diagnosed these openings to be the mouths of small ducts leading from the parotid glands, and that, instead of the secretions being poured out through Steno's ducts at the proper place, they are discharged through these ducts externally, just in front of the external Mr. D. has three children that have not this abnormality, but he has a brother-in-law (a brother to Mrs. D.), who has two children that have the like ducts discharging externally-making in all six cases, four males and two females, in the same family.

I find that whenever the excretions from the parotid glands through these ducts comes in contact with the air, in very cold weather, and when the mouths of the ducts are not kept clear and open to give free exit to the grandular secretions, the secretions accumulate in the ducts and produce glandular irritation, and when opened externally, discharge a very purulent excretion. I opened up two of the ducts, in each of two of the children, which were blocked up, and these discharged considerably. I probed two of the ducts with a small silver probe, and found that they led directly into the parotid glands.

I have never seen anything of this kind before, nor have I ever seen any literature upon this subject. I advised the parents to keep the ducts open to give constant and free exit to the secretions, and they have no trouble when this is done; and the discharge, when constantly going on, is so small that it is seldom noticed when kept clean.

The family record is unquestionably good through a long

line of ancestry, and there is not a shade of heredity in the etiology of these cases.

Have any of the readers of the Virginia Medical Monthly ever seen or heard of any such cases? Have these ducts ever been described or named? If any have ever treated such cases, give treatment, etc.

Gorrespondence.

Liverpool and Birmingham Hospitals and Personal Notes.

London, Eng., March 20th, 1888.

Dear Doctor Edwards,—I find the path to profitable study here not an easy one to tread. Therefore, I shall give you a few notes of places visited and advantages for study, hoping thereby to assist some visitor like myself bent upon learning much in a short time.

I landed at Liverpool on Monday, Feb. 20th, after a pleasant sea voyage from New York, and at once visited the Royal Infirmary at that place. It may be well known to the most of your readers that this is the home of Mr. Reginald Harrison, the author and surgean. I found only a small class of students attending the medical school at Liverpool, but they were most excellent students as I learned of one of their teachers, and the answers to questions given by them would do credit to any medical school in the world. I was so fortunate as to meet Mr. Harrison at his clinic which was extremely interesting. I was invited to visit his wards with him on that and the following day.

After the clinic I was turned over to Dr. Wallace, the gynæcologist, who is a very aggressive man in his department. He uses the extra peritoneal method of treating the pedicle after hysterectomy, but of course drops the pedicle after ovariotomy. Nearly all of his abdominal sections recover without rise of temperature above normal, as shown by the register which I had an opportunity to see.

Dr. Wallace has a peculiar theory of the pathological lesions in flexions and versions of the uterus. He says he

finds very many cases of anteflexion combined with posterior version, in which the uterus assumes the position of the "new moon" by falling backwards and tilting the cervix forwards. His practice is to cut through the posterior lip—a la Sims,—which will cause the uterus to right itself into a normal position and cure the attending dysmenorrhæa, etc.

The new hospital now in course of erection will have three hundred additional beds, which will give a great impetus to the school at Liverpool.

At Birmingham I was so fortunate as to meet an American, Dr. Edwin Ricketts, of Ohio, who has been a pupil of Mr. Lawson Tait for four months. I owe very much to this gentleman for his lively interest in showing me the medical institutions of the city and in many ways making my stay agreeable. He has been with Mr. Tait in every operation in that time and has seen over one hundred cases of abdominal section. Mr. Tait operates for biliary calculus, strangulated hernia, renal calculi, and nephrectomy, colotomy and enterotomy, etc., as well as the usual surgery done by gynæcologists. I was unable to see Mr. Tait operate, as I could not afford the fancy charge required to become a student of his. I may say, that the fee required is rarely paid by any but American students, of whom Mr. Tait has had several.

You are doubtless well aware of the present reticense of Mr. Tait as to his results, and that one of our American statisticians has failed to extract from him his figures since the famous announcement of 139 successive successful ovariotomies.

The visitor is however made quite welcome elsewhere in Birmingham. Dr. Thomas Savage, surgeon to the Spark Hill Hospital for Women, is a gentleman of high qualifications and generous impulses as well, who will permit any medical man who desires to witness his operations.

Dr. J. W. Taylor of the same institution is also quite hospitable in this respect. At the general hospital one may see all kinds of surgery. This old institution founded in 1765, has nearly four thousand patients each year and 38 to 40

out-patients. Last year 20,000 accident cases were treated there. The Queen's Hospital and Medical College has a large attendance also. Besides these institutions there is the General Dispensary. The splendid Eye Hospital is one of the finest in England. The Ear and Throat Hospital, the Work-House Infirmary—one of the largest hospitals in the world—with other smaller institutions of like character, make Birmingham a desirable field for medical students.

It is beyond doubt that cities, such as Liverpool, Manchester, Leeds and Birmingham are furnishing abundant facilities for instruction. The gentlemen having charge of these hospitals are highly efficient and competent to teach, and moreover, they are especially kind and attentive to visitors. They are, however, overshadowed by the greater city of London where all classes of students repair for all that the world's metropolis can give.

The medical schools in London are so well known to your readers that I shall not attempt any mention of them save in some instances to make certain comments thereon. Many of the hospitals are models of their kind, and one can have many advantages here if the proper course is pursued.

In my next letter, I will have something to say about London and its hospitals, medical men, etc.

Yours Truly,
I. S. Stone, M. D. (of Lincoln, Va).

34 Welbeck St., Cavendish Square.

Priginal Translations.

From the German. By M. D. HOGE, Jr., M. D., Richmond, Va.

Massage of the Abdomen with a Cannon-Ball.

An efficient massage of the abdomen for the relief of constipation cannot be easily carried out by patients in the usual way. It requires a good deal of energy on the part of the person himself, and to pay an expert is too expensive for every one. In order to overcome these difficulties, Sahli has advocated the following: The patients lie flat on their backs and roll around on their abdomens,

for ten minutes, a cannon-ball weighing from three to six pounds. The manner of massage may be easily modified by pressure on the ball, or raising and gently letting it fall—the direction of rolling may be reversed, etc. Sahli, however, recommends that the ball be rolled from the colcum towards the flexura sigmoidea, and thus in a mechanical manner propel the fæces onward. In winter the ball may first be warmed in hot water, or covered with woolen or flannel material.—Rundschau, Feb. 1, 1888.

Practical Substitute in Tracheotomy.

In order to obviate some of the disagreeable things connected with an inflexible tube, such as rubbing of the wall of the trachea, partial closure of the trachea above, etc., Dr. Schmidtmann has substituted elastic rubber tubes such as are usually employed for wound drainage. An important point is, that in every case the tube must be large enough to exactly fit the trachea. It is easily held in place by a pin or thread run through and fastened by adhesive plaster to the neck. The advantages of a flexible rubber tube over an inflexible metal one are: 1. Exact approximation to the anatomical conditions in each case. 2. Complete closure of the trachea from above. 3. Larger lumen of the canula. 4. Less irritation of the soft parts. 5. Self adjustment of the tube. 6. Less formation of crusts. 7. Less frequent change. 8. Ease and cheapness of material. Sahli.—Rundschau, Feb. 1, 1888.

Quebracho in Treatment of Wounds.

From a large number of experiments, Bordeaux warmly recommends the fluid alcoholic extract of quebracho as a curative means in wounds, abscesses, etc. Diluted with twice its quantity of water, it is an excellent astringent. Applied to freshly united wounds, they heal per primam; on granulating surfaces it is said to be better than iodoform. No suppuration has followed its use in contused or lacerated wounds. The fluid extract is applied directly to the wounded surface, upon which it quickly dries, forming a coating similar to collodium, and in many cases dressings and bandages are superfluous. As an intra-vaginal douche, in ulcerations of the neck of the womb (3ss of the fl. extr. to 3viij water), it is highly recommended. Its uses internally in asthma and dysentery are already well known. Central-blatt f. Chir., 1886, 41. Rundschau, Feb. 1, 1888.

From the French. By R. M. SLAUGHTER, M. D., Theological Seminary, Va.

Treatment of Typhoid Fever.

Prof. Jaccoud says (La Tribune Med., Feb. 12th, 1888), that the constant part of the treatment is regimen, and of this milk should constitute the fundamental agent. One of the invariable dangers of typhoid fever is insufficient elimination of urine both as regards quantity and quality. The early and continued administration of milk effectually combats this danger by assuring diuresis, and at the same time the

elimination of the excrementitious products.

In the first days of the disease from one to one and a half quarts of milk per day should be given, and the amount increased to two quarts in three or four days. This quantity is generally easily taken even by those patients who when well have little taste for milk. The regimen is to be complete with small quantities of bouillon. In all cases, it is well to give each day eight ounces of claret with or without water during the 24 hours. Next comes the antithermic medication, which is not to be confounded with antipyretic medication. These terms are far from being synonymous. The former acts by increasing the loss of heat in removing from the organism the caloric product. The latter acts, or it is so pretended, by lessening the production of heat. In the constant treatment, we find our best means in the antithermic medication, which is applicable to all cases, and of which cold baths are the best. As soon as the diagnosis is established, cold baths should be prescribed. should be made to the whole surface of the body, and rendered more efficient by the addition of vinegar instead of pure water. These baths should be repeated four times a day if the temperature of the patient does not exceed 102° F.; six times if the temperature reaches 103°, and eight times if it exceeds this. They should invariably be continued until convalescence is established beyond doubt. The cold baths lower the temperature from about one to two degrees. the effect lasting generally about three-quarters of an hour. Only a temporary cooling of the body is thus obtained, but when repeated several times each day, it gives rest to the organism, with periods of relaxation, and is of great benefit to the patient sometimes; after the use of cold baths for a day or two, there is a lowering of the height to which the temperature rises, but these cases are exceptional. Here the action is that of an antipyretic as well as that of an antithermic.

Together with the antithermic medication, constant stimulant medication with alcohol as a base should be employed. As soon as the diagnosis is made, alcohol in the form of rum or cognac should be given in quantities of 40 to 80 grammes (about 3x to 3ij) per day, according to age and condition of the patient. If in spite of this adynamia threatens, acetate of ammonia should be given in addition. If the bronchial catarrh is severe, it should be combatted by applying morning and evening 40 dry cups upon the lower extremities, and repeating for 6, 8 or 10 days in succession. Never use the cups unless the pulmonary symptoms are very acute, and then discontinue their use as soon as these symptoms disappear.

En résumé, milk, wine, acidulated baths, and alcohol are the means to be always employed from the beginning throughout the course of the disease in typhoid fever.

In many cases this is all that it is necessary to do, while in others resort must be had to certain supplementary measures.

In some cases it is convenient to add quinine or salicylic acid to the treatment, when after two or three days it is found that in spite of the cold baths, the fever continues so

high as to constitute a grave symptom.

How are we to judge when the fever constitutes in itself a grave symptom, and should be combatted by agents which act upon the calorigenic centres and lessen their activity? When there is a marked difference between the morning and evening temperatures (from 1 to 2 degrees) corresponding with the curve presented by physiological temperature variations, then the fever is not serious in itself and does not require fundamental treatment. When, on the contrary, the morning temperature is less that 0.9 of a degree lower than the evening temperature, the fever constitutes a grave symptom. A very high evening temperature is not necessarily a grave symptom. The danger is when the fever does not fall by morning from 1 to 2 degrees, and give the organism a considerable period of rest.

As an antipyretic in typhoid fever, quinine is more generally used than salicylic acid, but not because it acts better, but because salicylic acid is more often contraindicated. Quinine should not be given more than 3 days in succession. Upon the first day the maximum dose, say 30 grains of the bi-brom-hydrate, which is equivalent to 15 grains of the sulphate, should be given. This salt is better borne than the sulphate, and has the advantage of giving up in the or-

ganism a certain portion of bromine which acts as a sedation to the nervous system. This amount should be given in 4 doses, one every three-quarters of an hour, for elimination of quinine is very rapid; but when fractional doses are taken too far apart, no sensible action upon the fever is obtained. On the second day 22 grains should be given, and on the third 15 grains. The remedy should then be stopped for two or three days and then begin again. The quinine should be administered 7 or 8 hours before the expected time for the rise of temperature.

The doses, hours and methods of administration of salicylic acid are the same as in the case of quinine. The use of salicylic acid is contra-indicated when there is feebleness of the heart, functional affections of the kidneys and cerebral manifestations—so common in typhoid fever—and also

when thoracic symptoms are pronounced.

It remains only to mention a possible addition to the above medication, digitalis. Cardiac weakness due to pure functional insufficiency, with the absence of peri- or endocarditis, as is apt to occur in severe cases of typhoid, especially towards the close of the second week, constitutes a very serious symptom, and should be carefully watched for, as failure to recognize it will result in the loss of patients who might have been saved. In such cases renounce the use of quinine or salicylic acid, continue the rest of the treatment, and give digitalis for two or three days, and return to its use after a rest of one or two days. The infusion is the best

preparation.

Such is Jaccoud's treatment of typhoid fever. He uses no means to prevent diarrhea, or to bring about intestinal antiseptics. So far from combatting the diarrhea, he provokes it when it does not exist. The disease has its origin in the intestine; and the multiplication of pathogenic agents, harmful of themselves or by their products when absorbed, poison the patient. It is clear that this absorption would be promoted by the absence of stools. Jaccoud further remarks that the principal source of danger comes from the presence of the pathogenic agents in the mesenteric ganglia, the spleen and other centers of infection where intestinal antiseptics can have no action. Naphthol, so much used as an intestinal antiseptic, has the great inconvenience of producing constipation, which is a source of danger. There is no proof that the duration of the disease is shortened by the application of intestinal antiseptics. The treatment above

advocated is capable of bringing about a cure in 90 per cent. of cases treated.

Pathogenesis of Bright's Disease.

Le Practicien of the 13th of Feb., 1888, gives the following synopsis of the communication of Dr. Gaucher to the So-

cieté Médecin des Hopitaux upon this subject:

The forms of chronic nephrites included under the common head of large white kidney (parenchymatous nephritis or parenchymatous Bright's disease) have in different cases an entirely different pathogenesis. Some of these nephrites probably have as a cause the remains of a previous infectious disease, such as the late syphilitic nephrites, and such is probably the case in nephrites following scarlatina. In other cases, the disease appears to arise from derangement of the cutaneous functions caused by cold and chilling, as is taught by Semmola. In still other cases, it is of toxic origin; but apart from saturnine nephritis, which is a chronic interstitial nephritis of a special nature, the mineral poisons give rise most often to an acute nephritis.

Dr. Gaucher believes that he is able to affirm that epithelial Bright's has most often a toxic origin. He speaks particularly of that form which is primitive, of sudden and insidious development, and of which it is impossible to de-

termine well the etiology.

But if there be a poison, where does it come from? From the outside, or is it produced by the organism itself? This poison is of a complex nature, and is composed of divers extractive matters which result from the incomplete oxidation of nitrogenous substances. These extractive matters are all very toxic, and in the normal state they exist in very small quantities in the economy. When for some reason or another, they accumulate in the blood, their elimination by the kidneys irritates the epithelium of those organs, and gives rise to an epithelial or parenchymatous nephritis.

The experiments of Dr. Gaucher were performed upon the guinea pig—an animal whose kidney bears the greatest analogy to that of man. He employed successively the extractive matters, leucine, tyrosine, creatine, creatinine, xanthine and hypoxanthine; and all when injected under the skin, gave rise to an epithelial nephritis of the same nature as the large white kidney. The production of the extractive of urine is increased in diseases of the liver and in grave icterus. Thus can be explained the frequent occurrence of albuminuria in cirrhosis of the liver, for example. This is not merely a probability. In the greater part of the chronic

diseases, there exist troubles of nutrition which cause the incomplete oxidation of the nitrogenous substances, and these are the cause of the nephritis so common in the course

of chronic diseases of divers parts and origins.

He recalled next the fact that bouillon and meat extracts contain creatine in considerable proportion, and consequently are dangerous in nephritis. For patients with Bright's disease, bouillon is a solution of poison. In all diseases and even for healthy persons he declared the danger of the use of meat extracts, concentrated broths and meat powders, which besides the toxic mineral salts, particularly the salts of potash, contain much extractive matters.

Formula for Dyspepsia and Gastralgia.

M. S.—Wineglassful after each meal. Hurchard, *Le Pogrés Méd.*, Feb., 18th, 1888.

Proceedings of Societies, Boards, etc.

VIRGINIA STATE BOARD OF PHARMACY.

The Virginia State Board of Pharmacy met at the Hall of the Mechanics Institute, Richmond, Va., at 10 o'clock, A. M., March 27th. The Board is composed of the following Pharmacists: T. Roberts Baker, Richmond, President; J. W. Thomas, Jr., Norfolk; Robert Brydon, Danville; Edgar Warfield, Alexandria; E. R. Beckwith, Petersburg, Secre-

taru.

They found themselves confronted with a class of 37 applicants for examination. These were all required to write out the answers to printed lists of questions on Pharmacy by Mr. Baker, on Chemistry by Mr. Thomas, on Materia Medica by Mr. Warfield, and on Toxicology and Posology by Mr. Brydon. The Board was in session three days. Twenty out of thirty-seven passed satisfactory examination, and were licensed by the Board as Registered Pharmacists.

The names of those who passed are as follows:

1. J. H. S. Butt, Portsmouth. 12. Thomas A. Smothers,

2. Henry Buff, do Norfolk.

3. W. S. Culpeper, do 13. W. H. Washington,

- 4. L. M. Brownley, do Fredericksburg. 5. Lemuel Mayo, do 14. W. R. Jones, Gordonsville.
- 5. Lemuel Mayo, do 14. W. R. Jones, Gordonsville. 6. Z. W. Smith, Norfolk. 15. W. H. Shivey, Staunton.
- 7. Wm. E. Armstrong, 16. T. Madison Broadus,

Petersburg. Alexandria.

8. W. T. Witte, Richmond. 17. Samuel C. Richardson, 9. W. A. Campbell, South Boston, Halifax Co.

Berryville. 18. G. E. Barksdale,

10. J. H. Thompson, Richmond. Christiansburg. 19. C. H. Dorset, Richmond.

11. J. L. Fuqua, Liberty. 20. M. R. Pitzold, Manchester. Although the standard of per centage had been raised, it will be seen that more than two-thirds of the candidates passed proving that the operation of the Pharmacy Law has acted as a stimulus to study and intellectual development

in the ranks of the coming Pharmacists throughout the State.

At the adjournment of this meeting, Mr. Warfield's term expired by law, and the vacancy has been filled by the appointment by the Governor of Mr. John W. Pierce of Rich-

mond, who goes in for five years.

[We know Mr. Pierce (of the enterprising firm of Harrison & Pierce, No. 1 West Broad Street) sufficiently well to say that the Governor has made an excellent appointment to fill the vacancy caused by expiration of term of Mr. Warfield. Ed.]

Analyses, Selections, etc.

Surgical Branch of the Main Arteries.

Dr. Edmond Souchon, of New Orleans, La., in a valuable contribution to the March number of the excellent *Medical and Surgical Journal*, of his city, remarks, that all the main arteries of the body give off a collateral branch, which is so important surgically that he calls it the *surgical branch* of that artery. The profunda or deep femoral is a type of such surgical branch, which, as a rule, originates from the deeper portions of the artery, and is distributed to the deeper parts, and is most commonly single. This surgical branch

is mostly the great anastomotic medium to the parts beyond; it is the safety branch of the region beyond. A thorough knowledge of these branches is important so as to manage arterial hæmorrhage; to ligate or use compression for aneurisms; to ligate the main artery below the largest collateral if the limb becomes alarmingly swollen and blue after ligating a large surgical vein, so as to diminish the arterial supply of blood, and thus equalize the circulation and prevent gangrene, etc. When ligating a main or surgical branch, always ligate at least one-third of an inch from the origin of the surgical branch. Passing to special arteries, he first takes up:

A.—AORTIC ARCH, ETC. 1. Of the three branches, the innominate artery is the surgical branch. The accessory surgical branch is the right carotid and has to be ligated when the innominate is ligated to prevent the return of blood

through the circle of Willis.

2. The common carotid and internal carotid form really but one artery; surgical branch is external carotid. Ligation at the bifurcation deprives the brain of blood. Better ligate the external carotid, but also ligate at the same time inferior thyroid, lingual, and the facial if near by, to avoid secondary hæmorrhage.

3. Surgical branch of external carotid is the occipital through the descending cervical, which anastomoses with ascending cervical branch of the superior intercostal from the

subclavian.

4. Surgical branches of internal carotid are the anterior and posterior communicating, but they are beyond the reach

of the surgeon.

5. Of subclavian, the vertebral artery is surgical branch, as illustrated by the case of Banks, operated on in 1861, by Dr. A. W. Smythe, of New Orleans, and who died ten years

later, when an autopsy was performed.

- 6. The surgical branch of axillary artery is the subscapular, which anastomoses with the perforating intercostals from the aorta. It is important not to ligate the subscapular itself, nor the axillary below subscapular origin, as either would cut off the most important supply to the arm, followed likely by gangrene. Posterior circumflex is accessory surgical branch.
- 7. The superior deep brachial (profunda) is the surgical branch of the brachial. The accessory branch is the great anastamotic which gives collateral circulation on the inside of elbow by anastomosing with the recurrent ulnar and in-

terosseous; the deep brachial insures it on the outside by anastomosing with recurrent radial.

8. Surgical branch of the radial artery is the recurrent radial. Its accessory branch is the volar branch to the superfi-

cial palmar arch.

9. Surgical branch of ulnar artery is the interosseous; it anastomoses through its recurrent branch with the deep brachial, and below with the anterior and posterior carpal arteries from the radial and ulnar; the blood reaches the hand through the last anastomoses when both the radial and ulnar have been ligated in their course. 10. The accessory branch of the ulnar is the deep anastomotic branch to the deep palmar arch.

B.—Thoracic Aorta. 11. Surgical branches are the intercostal arteries. They anastomose with the subscapular artery; this is important in the surgical pathology of sub-

clavian aneurisms.

C.—Abdominal Aorta. 12. The surgical branch is the caliac axis. The renal arteries are larger, but the cæliac axis anastomoses in the omentum with the superior mesenteric artery through the right gastro-epiploic from the hepatic and the left gastro-epiploic from the splenic.

13. The only other branches which play a role are the

middle sacral and specially the lumbar arteries.

D.—The Iliacs and Divisions have almost the same arrangements as the arteries of the neck and upper extremities.

14. The common iliac and external iliac form really but one artery. As the external carotid is the surgical collateral branch of the carotids, here the true surgical branch is the internal iliac artery. And the accessory branch is the ischiatic artery, because of its anastomoses with the branches of the deep femoral.

15. The surgical branch of the external iliac is the epigastric, because it anastomoses with the internal mammary; its accessory branch is the circumflex iliac, because it anastomo-

ses with the lumbar arteries from the aorta.

16. The typical surgical branch of the femoral artery is the deep femoral or profunda, on account of its anastomoses above with the ischiatic from the internal iliac, and below with the articular arteries from the popliteal. Its accessory surgical branch is the great anastomotic.

17. Surgical branch of the *popliteal* is the *anterior tibial*. It anastomoses above with the articular arteries and great anastomotic, and below through the perforating artery with

the external plantar, posterior tibial and the anterior peroneal. A case reported in the N. O Med. and Surg. Journal (1885), by Dr. David Jamison, demonstrates this conclusively.

18. Surgical branch of posterior tibial is the *peroneal artery*, because of anastomoses through its anterior terminal branch with the tarsal arteries from the dorsal artery and

the anterior tibial.

Sænger Cæsarean Section.

Dr. E. S. McKee, of Cincinnati, O., reports the case (N. O. Med. and Surg. Jour., March, 1888), which he saw last spring in Berlin, operated on by Prof. Gusserow. Patient rachitic; age 28; full term; measurements showed necessity of operation. Abdominal incision commenced three fingers' breadth below the umbilicus and extended to within the same distance of the symphysis pubis. The uterus presented nicely, and the walls closed behind it. A rubber tube, the size of a finger, was passed tightly around the uterus just below the the child's head. Provisory sutures were passed through the adductors to keep the bowels from protruding, which will result unless there is considerable vomiting. In addition. as vomiting occurred in this case, the bowels were retained by means of warm cloths. The uterus was incised, beginning near the fundus and extending down to where the peritoneum becomes movable and sits loosely. A large quantity of dark red blood shot out through the incision, showing that the placenta was cut. Cutting through this, liquor anmii burst forth. Hæmorrhage which now appeared was controlled by drawing tighter on the rubber tube. A live, mature, but poorly nourished child was removed. Placenta and decidua were then loosened, and the uterus carefully cleared of all such matter. Cavity was then strewn with iodoform. Incision closed with silver wire sutures passed through the muscles, but did not penetrate the decidua. Inserted 16 silk sutures, piercing peritoneum only. Perfect coaptation of the parts was made. Four points of hæmorrhage were ligatured. Uterus was made to contract by applying sponges soaked in hot sublimate solutions. line was powdered with iodoform. Patient recovered in 8 weeks. Child lived. Vomiting was the only bad symptom.

Bronchotomy is Pseudo-Membranous Croup.

Dr. Thomas Herbert, of New Iberia, La. (N. O. Med. and Surg. Jour., March, 1888), places little confidence in reme-

dies for this disease. He has had, to us of Virginia, a remarkably sad experience in finding no value in mercury, in alcohol, etc., that is, if he classes "true croup" and diphtheria as the same disease. He claims only one case of cure by medication (mercury bichloride and emetics) out of a total of twenty-five cases of the disease. In his experience, a case of pseudo-membranous croup that lasts three days after he first sees it is very exceptional. The shortest time in which he has observed the complete detachment or disappearance of a talse membrane is forty-eight hours, and the vast majority of cases of membranous larvngitis die before that time has elapsed. Instead of depending on medication, he has tried, and recommends bronchotomy or tracheotomy as early in the course of the disease as circumstances will permit, before depressing remedies have weakened the child; before mucus clogs the lungs, or the veins of the neck have become overfull from inefficient respiration, when the risk of severe hæmorrhage materially diminishes the chances of success. He advises the operation in all patients above one year of age, "in whom the disease is fairly well recognized at your first visit." He cites as an illustrative case of what he recommends, the case of a girl five years old. Before his tracheotomy instruments could be gotten from his office (six miles away), he severed an artery which was ligated before opening the trachea. Three rings were divided, including the cricoid cartilage, and the curved end of a male silver catheter was introduced, through which air immediately entered freely. He had to hold this catheter in three and a half hours, awaiting the arrival of his case of instruments, when the tube was inserted in lieu of the catheter. Five days later the false membrane was ejected in a mass of bloody pus. She made a good recovery, after keeping the tube in fifteen days. He urges country doctors to be always ready to operate, and not to wait for the city surgeon in cases of emergency.

Profound Opium Narcosis Relieved by Atropia, Digitalis, and Respiration Through Tracheal Tube.

J. F. Grænevelt, R. S., reports the case (N. O. Med. and Surg. Jour., March, 1888), of a man, aged 60; had taken about an ounce of laudanum, as the result of an alcoholic spree; respirations four or five a minute, pupils very large, face cyanosed, etc. Apomorphia, gr. 1-10th, produced no effect. Six hypodermic injections of atropia sulphate, each grain 1-60th—total gr. 1-10th—were given in course of about four

hours. Stomach was washed out by stomach pump. Faradic current was applied intermittingly—one pole over cervical region of the cord, the other over the chest. Good effect followed blowing forcibly into a gum catheter introduced into the trachea. To guard against heart failure, 5 iiss tincture of digitalis in all was given hypodermically at intervals. Consciousness rather suddenly returned after some 8 hours of treatment. Then he drank a cup of coffee, and recovered so as to be discharged in a few days.

Intubation.

Dr. W. C. Cheatham, of Louisville, Ky., says (South. Pract., March, 1888) that Desault accidentally demonstrated in 1881 that the larynx would tolerate a tube by passing one through the nose into the larvnx which he was trying to pass into the esophagus. Bouchut, in 1848, established that (1) tubage is easy by means of a canula fastened on the inferior vocal cords without interfering with the epiglotis; (2) the larynx tolerates a canula; (3) croupous dyspnæa and other larvngeal affections can be relieved without tracheotomy: (4) the membrane is expelled through the tube with facility; and (5) tubage is of great advantage to country doctors who cannot get assistance. But Trouseau ridiculed the idea, and it was soon forgotten. But Dr. O'Dwyer, of New York, who knew nothing of this history, resurrected intubation in 1880, and now it is firmly established. It is successful in about the same per cent. of cases (about 26) as tracheotomy, and does not present the horrors of that operation. After describing the instruments that come with "O'Dwyer's case," he says the child should be wrapped in a shawl so as to pinion its arms. The head should rest well upon the left arm of the assistant, seated in a high chair, while another assistant holds the head firmly and watches the gag. Around the left forefinger wrap some surgical plaster that sticks to itself only; and if the child is able to bite, wear on this finger a broad silver ring reaching from the second to the third joint. Thread the tube and attach it to the introductor. Pass left forefinger in right side of the mouth—the gag being on the left side—well back until the epiglottis is felt (which is sometimes hard to recognize in the young, especially if edematous), or the opening of the larynx is felt. Then with the left hand pass the introductor with the tube in the right side of the mouth-starting with the handle vertical, bringing it gradually up to a horizontal position as the tube passes gently back along the palmar surface of

the finger of the left hand, until it gets to the mouth of the larvnx, when it usually glides in easily. The thumb of the right hand now pushes the button or the handle forward; the ejector dislodges the tube from the obturator; the forefinger of the left hand is placed on the head of the tube to hold it in position; the obturator is withdrawn; the tube is pressed well into the larvnx; the finger is withdrawn, the gag removed, and the thread pulled to one side of the mouth. Dyspnæa is instantly relieved; the child coughs a little, and the thread gags a little. But the thread is left in a few minutes until you are sure the tube is in the proper place, and not plugged with membrane. Then the finger is introduced again (with or without gag) resting the end of the finger on the head of the tube to hold it in place, and the thread withdrawn. One end of the double thread should be cut as short as practicable, so that as little will have to be withdrawn through the eye in the tube as possible.

Semi-solids and solids can be eaten without trouble, but drinking or the administration of fluids gives trouble. The tube prevents closure of the larvnx by the epiglottis so that fluids enter the windpipe, causing violent coughing, strangulation, bronchitis, and pneumonia. To overcome this difficulty of swallowing fluids, put one end of a tube from a feeding bottle, in a glass of the fluid (or, if the child is old enough, use a glass tube); place the patient on the stomach, with head lower than the chest, and let him draw the fluid up, and of course none can enter the larvnx. If the child does not understand, pump the fluid up with a syringe, so as to let him get a taste, and discover for himself that he

can take the fluid without strangling.

The tube has been worn from an hour to 14 days. There are no certain indications of the time to remove it. Always be prepared to introduce another tube at once should the emergency require it. To remove the tube, first feel the head of it with the forefinger of the left hand, pass the extractor along the palmar surface of this finger, the opening of the tube felt for, the extractor entered, make pressure on the lever with the thumb of the right hand, and make trac-

tion up and back, and withdraw the tube.

Among the dangers or accidents of intubation, the tube may pass into the esophagus, or a false passage may be made, or the diphtheritic membrane may be pushed down before the tube and trachea occluded; the tube may slip between the cords into the larvnx—all of which dangers can be avoided by care.

Intubation gives better results than tracheotomy in children under 3 or 4 years old, and as good in older children. It is best in ædema of glottis, and strictures of the larynx and of trachea. The O'Dwver tube extends to within half an inch of the bifurcation of the trachea. Half of the calibre of the tube may become occluded without embarrassment to respiration, and secretions can be coughed up with much less difficulty than after tracheotomy. Dangers of tracheotomy are primary and secondary hæmorrhage; tracheal incision may be too short or too long, or to one side, too high or too low, or made through and through the trachea; or the canula may be passed outside of the mucous lining of the trachea. pushing the membrane before it—the canula not getting into the trachea at all. Such a failure occurred once to so good a man as Dr. Jacobi. Many other dangers of tracheotomy are mentioned.

The Charge to the Graduating Classes of the Medical and Dental Departments of the University of Tennessee,

By Dr. Paul F. Eve, of Nashville, Tenn., as reported in the *Southern Practitioner*, March, 1888, is a good one, but, of course, is after the usual order of such addresses in the points considered, the advice given, etc.

Excision of Inferior Maxilla.

Drs. W. B. Young and M. Anderson, Bon-Air, Tenn., reported the case (South. Pract., March, 1888). Man, 35; diseased tooth; symptoms of abscess of antrum of Highmore set in. Sept. 29th, first bicuspid was extracted; from this cavity bloody corruption flowed until the maxilla was excised Jan. 14th—that portion reaching from the incisor to the molar—removing also a quantity of carious bone resembling blackened honey-comb. Very little deformity resulted, and patient is doing well. The cavity of wound was kept dressed with medicated cotton.

Antipyrin Hæmostatic.

The experience of Dr. W. M. Powell, of Albany, Tex. (Daniel's Tex. Med. Jour., March, 1888), in two cases confirms the conclusions of Dr. Cosati (Independencia Medica) as follows: "Antipyrin is a powerful hæmostatic; superior to iron perchloride, because it leaves the wound perfectly clean, and even superior to ergotine, because it is not toxic in ordinary doses; it is antiseptic as well as antipyretic, and its action is very prompt. A four-per-cent. solution is about the best strength to apply to bleeding surfaces.

Treatment of Dysentery.

Dr. J. W. McLaughlin, of Austin, Tex., relies (Daniel's Tex. Med. Jour., March, 1888) principally on salines and opium for acute catarrhal dysentery—generally sthenic. Cocaine with morphine by enemata relieve tenesmus. Simaruba officinalis with columbo and opium give good results in sub-acute form. If colitis or ulceration of bowel occur, use large injections of water—hot, warm or cold, as best suited to the patient. Labarraqué's solution of chlorinated soda (1 part to 40 of water), injected in quantities to distend the colon, is excellent. Quinine is used in malarial cases. In so-called "bilious cases" (he doubts that liver derangements cause this condition, and that mercury possesses specific chologogue properties), mercuric salts are given; and large doses of powdered ipecac will quickly arrest the disease In grave forms of dysentery characterized by profound toxemic depression and threatened fatal heart failure. he confidently recommends digitalis in large doses. Naphthalin is good in the ordinary run of cases of dysentery.

Chronic Granular Conjunctivitis or Trachoma.

Dr. F. E. Yoakum, President [of something, but don't say what], in this paper (Daniel's Tex. Med. Jour.; March, 1888), refers to several authors [but don't say who], who have written on this subject. Muriate of ammonia crystals, applied every day or two firmly but evenly to the inverted lids, gives great pain for a few seconds, when it passes off, leaving the eye clear and moist. Cocaine may be used if desired. Instillation of aqueous solution of jequirity under the lids, which are then closed and well rubbed for a few seconds, is excellent treatment when there is dizziness and inability to raise the lids. This remedy may be watchfully repeated every three or four week's, after the jequirity inflammation has entirely subsided. In mild forms of the disease, invert lids, and carefully apply crystals of sulphate of copper first to the retrotarsal folds, and then every part of the lids; then thoroughly wash out any excess with clear water by means of a camel's hair pencil, after which a few drops of cocaine solution are instilled. Repeat this treatment every day or two. In exaggerated severe cases of the upper lid, hold the inverted lid with the fingers of the left hand; pass the end of the forefinger or thumb of right hand, palmar side toward eye-ball, under the inverted lid. Thus the upper tarsal border and the swollen or infiltrated retrotarsal fold are placed just between the thumbs (or forefingers); and if these fingers are now pushed toward each other, and at the same time the thumb (or forefinger) of the right hand is made to glide slowly forward from under the trachomatous conjunctival fold, this steady, continuous pressure will force out the contents of the trachoma follicles. By repeating this manipulation several times, if necessary, along the whole breadth of the eye-lid, you can, in one treatment, remove all the trachoma follicles. This squeezing is sometimes very painful. After a day or two, apply a weak solution of sublimate (gr. $\frac{1}{4}$ to $\frac{3}{5}$ j), or solution of silver nitrate (gr. v-x. to $\frac{3}{5}$ j water.

Etiology and Treatment of Talipes.

Dr. C. McReynolds, Fort Smith, Ark., writes on this subject (Daniel's Tex. Med. Jour., March, 1888). The most modern and rational theory of the etiology of talipes is a paralysis affecting the fœtus in utero. The muscles involved are contracted—not contractured. Treatment of congenital form should begin at birth. The foot should be at once brought as nearly as possible into normal position, without inducing inflammation. It is essential to have the hearty co-operation of parents or nurses. Among therapeutic agents, electricity stands first; but massage, kneading, strychnia hypodermically, or by ointment, etc., are also indispensable. The simplest apparatus, both as to construction and adaptability, is invariably the most satisfactory in treatment. Motion is the normal state of muscle. To imitate as nearly as possible natural movements should be the dominent idea in treatment. Furthermore, any apparatus should be easily removed for the purpose of applying electricity, massage, etc. In infants, he has seen rapid progress from straight splints. In illustration, he cites the case of a child six weeks old with double equino-varus, cured by electricity and strychnia ointment, straight splints, threequarters of an inch wide, extending from the head of the fibula to sole of the foot, worn for six months. The most adjustable and satisfactory splints are those made from sole leather. Good results often follow the proper application of adhesive plaster. Cut a strip three to five inches wide, and long enough to go nearly around the foot and about half way up the thigh. Begin on the dorsum of foot, and carry the plaster around the sole, in the direction in which the foot is to be drawn, as far as the head of the fibula; apply over this the roller, then reverse the end of the plaster and re-apply the roller. The plaster should never encircle

the foot, for fear of retarding the circulation. Excoriations result when the plaster is worn any great length of time. and is the objection. Artificial muscles as a permanent tractile force are often needed. Cut a triangular strip of adhesive plaster into a number of strips, all converging to the apex. At the apex secure a wire hook. Apply the plaster to the foot, and the hook located at a point that will represent the insertion of the affected muscle. To represent the origin, a tin plate is cut about two-thirds the length of the tibia, and and in width about a quarter of the circumference of the limb. Secure an eye about an inch from upper end of the tin strip, which strip is held partly by two adhesive strips long enough to encircle the limb. Through the centre of each adhesive strip cut two slits, through which to pass the tin. Apply to the side of the limb where traction is to be made, another strip of plaster twice the length of the tin and somewhat wider. On this, place the tin strip—the upper end being level with the plaster, pass the upper strips around the limb; reverse the long vertical strip on the tin. cutting an opening for the eye; and over all, pass a nicely adjusted roller to retain everything in proper position. The artificial limbs are represented by india-rubber tubing, having a small chain in each end, with which tension is easily regulated; these are hooked into the eyes above described, that represent the origin and attachment of the muscle. The traction is sufficient, unless structural changes have occurred, to overcome the rigidity of the opposing group of muscles. The foot is restored to normal position, and so retained, and made to go through with natural movements.

Indications for tenotomy: Place the shortened tissues on the stretch, and apply point pressure. If spasmodic contractions ensue, the tissues have undergone structural changes, and will not admit of elastic tension, and tenotomy is indicated. It is never indicated unless structural

changes exist.

Cocaine for Cervical Dilatation for Dysmenorrhæa.

Dr. M. F. Birdsong, of Greenville, Texas, reports (Duniel's Tex. Med. Jour., March, 1888) two cases in which 10 grains of muriate of cocaine, dissolved in 10 minims of water and 4 drachms of liquid vaseline or lanolin, were applied, by means of absorbent cotton, in the cervix and around the vaginal portion, and the operation of instrumental dilatation of the cervical canal was successful and without material pain.

Theory of Mind-Reading and Slate-Writing--- Dual Brain.

Dr. R. C. Word, of Atlanta, Ga., discusses this subject. (South, Med. Rec., March, 1888.) He adduces cases to show that, to all intents and purposes, the brain is a dual organ: that, though the two brains ordinarily act as a unit, they may act separately. And then Dr. Word advances as a theory that, under certain peculiar circumstances, one side of the brain may converse with the other side. In fact, he thinks it possible, in some exceptional cases, for one side of the brain to be electro-positive and the other side electronegative. Under these circumstances, the link which ties the two brains together is, in some mysterious way, severed, or for the time being deprived of its co-ordinating influence. In this condition, the electro-positive side may ask questions which may be automatically answered by the electro-negative side. Under these circumstances, any incident or memory latent in the brain is liable to be revived, and to be automatically and unconsciously reproduced by the medium; and when thus presented it comes with all the force and conviction of a communication from a third or an outside party. Thus the "slate writer" gets messages from his or her own brain; or if brought into rapport (nervous relation or connection between parties) with another party, he may get mental impressions from him also.

Arrested Development of Forearm.

Dr. J. M. Mendenhall reports the case (Daniel's Tex. Med. Jour., March, 1888), in which the baby seemed to have an intra-uterine arrest of development of the left forearm—about two inches of the ulna, with two rudimentary fingers on the end of it.

The Charge to the Graduating Class of the Medical Departments of University of Nashville and Vanderbilt University,

By Dr. T. L. Madden, of Nashville, Tenn. (Nashville Jour. Med. and Surg., March, 1888), although perhaps an hour and a half address, is filled with good advice.

Vagary of Menopause.

Dr. J. C. Shepard, Winchester, Tenn., reports the case (Nashville Jour. Med. and Surg, March, 1888) of a lady, aged 46, mother of several children, who supposed herself pregnant and in labor at full term. On examination, it was found to be all in the imagination.

Different Diagnosis of Psoriasis.

Dr. Henry J. Reynolds, of Chicago, Ill., gives the following differential diagnostic table of psoriasis in Atlanta Medical and Surgical Journal, March, 1888.

1 and N	urgicar	Journal,	wraten,	1000	•		
Hairs normal	soles lefin e d	Mo crusts No itching No moisture	shiny g on re-	shiny, silvery	T is	General as to body Coin sized Non parasitic	Psoriasis,
	Multiform Usual Irregular patches	Common Yes Moist	Not shiny Never so	Not shiny	Not so Flexors	Never universal.	ECZEMA.
Syphilitic history	ver-	Never Generally pus or other moisture sooner or later.	Dark or copper color Sulphur yellow More adherent No	Not much so	Yes (?) Extensor Redness beyond scanty covering		Syphilis.
Brittle, and broken off	Scalp Cup shaped	Crusts	Sulphur yellow	No scales	Never Scalp	Parasite character-	FAVUS.
Brittle, broken off and loose			Not white or shiny		N _o	Never so large Parasite characteristic	TINEA TONSURANS.
	Never circumscribed. Diffuse as to scalp.			Greasy scales	None	Diffuse as to scalp.	SEBORRHŒA'SICCA OF SCALP.

Veratrum in Pneumonia of Children,

Dr. J. T. Hutchins, Oakland, Texas, reports a case (Daniel's Tex. Med. Jour., March, 1888). Girl, et. 11, right pneumonia. Skin (on third day) hot and dry; pulse and temperature high; respirations hurried; nervous cough. Prescribed blister over painful side, and a dose of calomel. Also five-sixths of a drop of [Norwood's tincture of] veratrum every half hour or hour until seven drops were given. Patient was calmed; temperature lowered; gentle perspiration developed; pulse reduced to normal; diminished respirations; lessened nervous cough. This treatment with veratrum was continued daily until twelfth day, when resolution set in.

Return of Menses and Second Sight in Old Age.

Dr. R. T. Knox, of Gonzales, Texas, reports the case (Daniel's Tex. Med. Jour., March, 1888). English lady, et. 78, active about household affairs. Two years ago had double pneumonia; recovered. Menopause came on at 35 years of age, when eyesight failed, requiring glasses. Two years ago she gave up spectacles, and now reads with naked eye. At the same time, her menses returned and have come on each succeeding month since, as when she was young; she has no disturbance, and can do as much work as any one of her age and sex.

Ipecacuanha.

Dr. L. B. Bouchelle, Thomasville, Ga., defends this good old remedy (South. Med. Rec., March, 1888) as an emetic, expectorant, soporific, diaphoretic, revulsive, alterative. It is the remedy for croup.

Reflex Paraplegia and Spasms due to Phimosis.

Dr. J. E. Roach, of Sipe Springs, Texas, reports two cases (Daniel's Tex. Med. Jour., March, 1888) of reflex troubles in children cured by circumcision for phimosis.

Malarial Congestion.

D. J. A. Lipscomb, of Memphis, Tenn., has a good paper on this subject (*Memphis Med. Monthly*, March, 1888). The cases of malarial classed as congestive may be arranged, for practical purposes, into (1) the *comatose*, in which the force of the morbid impression falls on the brain; (2) in the *spasmodic*, it falls on the spinal cord and medulla oblongata; (3) in the *pulmonary*, on the respiratory organs; (4) in the *chol-*

eraic, on the digestive organs; and (5) in the algid, on no one organ more than another, unless on the cutaneous surface, inducing copious cold sweating. Post mortem, in this form, we find nothing more than a paler and drier state of the tissues than natural. The indications for treatment are, therefore, bring about reaction by means which most speedily restore tonicity of the tissues, the molecular changes and the vaso-motor sensibility; and also by means of antiperiodics. To speedily restore the lost tonicity, the cold douche conjoined with hypodermics of morphia and atropia, or of atropia and digitalin, are the best. Pour the cold water from a pitcher directly upon the back, head and down the spine. After reaction, inject about 7½ grains bisulphate of quinine under the skin, every two or three hours, as required.

Different Temperature Effects of Antipyrin and Antifebrin in Axilla and in Rectum.

Dr. W. B. Rogers, of Memphis, in discussing Dr. Lipscomb's paper on "Malarial Congestion" related the singular experience that in the case of an engineer who had a chill followed by fever, and was comatose, the temperature was in axilla 103.5°; in rectum 107.6°. Gave antipyrin Dij in half hour, hypodermatically. In an hour, skin moist, pulse slow and soft, and it appeared that the temperature had fallen wonderfully. But the thermometer in axilla showed 100°, while in rectum 107.6°—the same that it was before the antipyrin was given. He then gave antifebrin Dij in all during the night. In the morning the axillary temperature was 98.4°; in rectum 103°. Thus when you reduce the skin temperature you do not always reduce internal temperature. During the night he also gave quinine—25 grains by mouth and Dij by rectum. That evening rectal temperature went back to 107, while skin kept cool, and mind cleared up, pulse good. [This is big dosing.]

Abdominal Sections for Results of Chronic Pelvic Inflammations.

Dr. R. B. Maury, of Memphis, Tenn., reports (Memphis Med. Monthly, March, 1888,) six months work in abdominal surgery. Pelvic peritonitis, and not cellulitis, is the characteristic feature of chronic pelvic inflammations in the female. In many cases a cure is effected only by an operation for removal of the diseased appendages. He then makes record of ten cases of section which have the following headings:

I. Pyosalpinx with cystic ovaries—removal of appendages—recovery in four weeks. Patient æt. 27 years, mother of

one child 3 years old.

II. Chronic ovaritis; appendages removed, recovery as to operation, and menstruation stopped, vaginismus cured, and old pain is relieved; but she remains feeble, is unable to walk and suffers pain in left groin when she gets out of bed.

III. Chronic ovaritis in a lady æt. 28, since confinement three years ago. The broad ligaments were rigid and unyielding. All the appendages were removed through a $2\frac{1}{2}$ inches incision. In $2\frac{1}{2}$ months she was up and doing well, but a sinus remains at the lower end of the incision where the drainage tube was.

IV. Right ovarian abscess, her trouble beginning 12 years ago at birth of her first child, gradually increasing in severity until now. Left ovarian hæmatoma. All appendages

with ovaries removed. Recovery in two months.

V. Chronic peritonitis with ovarian abscess. Abdominal section and drainage. Recovery sufficient to return home in two months with a small tube sinus, with few evidences of pelvic roof inflammation, and the uterus was immovable.

VI. Intra-peritoneal hæmatocele resulting in suppuration and septicæmia. Abdominal section and drainage. Opening entirely closed and she restored to health.

VII. Chronic peritonitis with effusion of sero-pus. Abdominal section and drainage. Recovery of health in about

four months

VIII. Small ovarian monocyst with twisted pedicle and extensive omental adhesions. Ovariotómy. Recovery for a month or so; but soon the old pains returned, and she again suffered very much. Present condition unknown.

IX. Uterine fibroid; pelvic abscess. Hysterectomy. Re-

covery of health in four months.

X. Tubal pregnancy to the full term of nine months without rupture of the tubes, etc. Dead feetus removed by abdominal section. Recovery of patient from operation, but death from phthisis 28 days after operation.

Spinal Irritation Complicating Pregnancy and Labor.

Dr. J L. Napier, of Blenheim, S. C., reports (N. C. Med. Jour., March 1888) some cases of interest bearing on this subject; but he cannot find any literature on it, although it is not an uncommon condition, and it sometimes is serious

—one of his few cases even ending fatally. Albumen was found in the urine in each of his cases; and there was undoubtedly uræmia. One or more tender points on pressure along the the spine were very marked features. The Doctor remarks in possible explanation of the occurrence of his several cases that an endemic influence remained as a result of the epidemic of diphtheria that had been prevailing for some years in his community. The acme of the spinal irritation epidemic was reached during the winter of 1883–4, when he had sixteen cases in his entire practice among males and females. Some of the cases were severe enough to bear a decided look of cerebro-spinal meningitis.

Spinal Curvature.

Progress for February, 1888, contains a miserably printed article on this subject, by J. A. Comingor, of Indianapolis. He calls attention to the fact that rotary lateral spinal curvature seldom occurs in persons who engage in active physical pursuits, such as trunk-carriers—especially those who carry heavy weights on their heads-waiters, etc. Such occupations compel the maintenance of the erect posture; the muscles of the spine and body act with equal force and energy, and maintain harmony in stature. When the disease becomes chronic and the vertebræ firmly fixed, next to nothing in the way of restitution can be done. Even in the early stages, it is difficult to reduce the curves and maintain the erect posture of the spine. The serate group of muscles have much to do with this disease. the external expiratory muscles, and by their action, with the rhomboidei, the chest expands. These muscles also rotate the spine on its own axis. Restore the lost tonicity to these muscles by correcting careless habits in walking, sitting, etc. The gymnasium should be patronized. wearing of a weight of some sort on the head and marching to music, as in the dance, are practical suggestions. When impracticable for any cause, to resort to this systematic training, an elastic apparatus, so as to supply muscular deficiency at one point, and overcome muscular tension at another, is worn. But if the muscles have become permanently contracted, they must be first divided before any apparatus can do good.

In regard to Pott's disease, he thinks it due to traumatism. Rest is the principle of treatment. Sayre's jacket, he thinks, deserves a much lower place in the list of appliances than is usually accorded it. Suspension is given up in his prac-

tice. Extension is best applied with the patient in the recumbent position. A slat-lounge or bedstead, with slats removed between shoulders and hip, answers fairly well. If the lesion is confined chiefly to the vertebral bodies, place the patient on his abdomen with face downwards; if in the processes, on his back. The weight of the body, with a little traction, furnishes the requisite extension—in fact, he claims better extension in this way than by suspension. The steel brace, with its many improvements and elastic attachments, he thinks improvements over Sayre's plaster jacket, which latter must be permanent, while the former can be removed every night and re-applied in the morning. tions of discomfort of the properly adjusted Savre's jacket. the benefits of nightly removal of the dressing, the rest to weary muscles by letting the patient sleep at night without the jacket, etc., are singularly fanciful in our experience with Sayre's jacket. In the great majority of cases, nothing is more comfortable to the patient with spondylitis than a well-applied Sayre's plaster jacket—unless it be to feel that he is cured and needs no artificial brace or support. We have used suspension regularly since Dr. Sayre first popularized it years ago; but we have thus far met with only two cases in which extension in the horizontal position of the patient was at all preferable to extension by suspension. The removable corset-jacket, such as Dr. Milton Josiah Roberts, of New York recommends, is desirable for convalescing cases.—Ed. Va. Med. Monthly.

Hospital Notes.

A*poor heading for some good reports by Dr. W. W. Lane, of Wilmington, N. C. (N. C. Med. Jour., March, 1888), of cases

occurring in the Wilmington City Hospital.

I. Cystic degeneration of left kidney in a fine looking mustee, æt. about 60 years. Severe blow in left side about two years ago, followed by large tumor, which developed gradually, filling whole of abdomen and oppressed respiration. Explorative incision did no good. Death in 58 hours.

II. Caries of ankle, in colored girl, at. 17, resulting from sprain. All diseased bone was excised with a large trephine and a chisel. Iodoform dressing over the open wound. Recovery with only slight inward inclination of foot and a little hitch in gait. Every portion of necrosed bone was removed.

III. Mulatto boy, aged 16, received a blow on arm, which

injury resulted in inflamed elbow-joint and fistulous tracts leading to lower end of humerus. Von Langenbeck's excision of elbow-joint was performed, resulting in a fibro-ligamentous joint and allowing of a good deal of arm motion. Incision was along posterior aspect of elbow, through tendon of triceps towards inner condyle, about 4 inches—2 above and 2 below the joint. Olecranon chiselled off—ulnar nerve being held aside. Heads of radius and ulna were freed from attachments and pushed through wound by bending forearm upwards. The heads of these bones were removed with chain saw, as also humerus above condyles Bichloride dressing. Arm semi-flexed with fenestra in felt splints opposite the wounds.

Tasteless Preparations of Cascara Sagrada (Rhamnus Purshiana).

The chief objection to cascara sagrada heretofore has been its inherent bitterness. In the light of recent researches, tasteless preparations of this drug, highly efficacious medicinally, are now to be had. These discoveries mark a distinct advance in pharmacal attainment and in the therapeutics of chronic constipation, since this remedy can now be much more generally and persistently administered.

A valuable contribution to the knowledge of the chemical constitution of this drug, by H. F. Meier and J. Leroy Webber, appeared in the American Journal of Pharmacy, for February, 1888, which makes it possible not only to obtain a true interpretation of the various clinical observations, but clears up apparent anomalies, and also indicates the reasons for observed effects, which have lately been disputed, but now admit of no further question or misunderstanding. Among the discoveries referred to is the influence of a class of vegetable ferments, and their recognition, as the causes of various abnormal conditions, such as colic, vomiting, nausea, diarrhæa and dysentery, which occasionally attend the administration of certain drugs.

Frangula bark, when fresh, contains such a ferment in excessive quantities, and is, therefore, unfit for use until the ferment has exhausted itself—the process usually occupying several years. It also appears that cascara contains some of this principle, which accounts for occasional untoward effects of the drug. These effects are, therefore, not due, as has been supposed, to any idiosyncrasy on the part of the patient, or to the laxative or toxic constituents of the bark itself, but to a distinct objectionable principle, which,

once recognized, can be rendered inoperative and harmless. Messrs. Parke, Davis & Co., of Detroit, Mich., first clearly recognized the principles involved, and by the application of such intelligent comprehension, formulated and adopted correct pharmaceutical processes, which have overcome all the difficulties heretofore existing. As a result of their investigations, they now offer a fluid extract and also a concentration, all of which (designated as "Formula of 1887") exhibit only the desirable laxative and tonic properties; and being free from this ferment, are incapable of producing griping, nausea, or any of the mal-effects above enumerated.

It appears that these ferments are distributed through a large number of vegetable substances, not being confined to unripe fruits only, but also exist in the root, bark, leaf or even in vegetable extracts, of which we have illustrations in various juices, liquid or inspissated. Of this latter class aloes will serve for an example. A familiar illustration of an unaltered vegetable would be the cucumber, the green apple (familiar to the school boy), and unripe fruit generally. In the case of the cucumber, experience has taught the means of removing this ferment by dialysis or osmosis. We sprinkle salt over it or surround it with a strong brine which provokes an outward flow of the fluid containing the ferment, with the result that the ferment is to a large extent removed, and thus rendered incapable of producing the same conditions in the stomach, for which it was intended in the plant—that is, the creation of vegetable acids from other material previously existing, in the same manner that pepsin, likewise an unorganized and soluble ferment, provokes the solution of fibrin and albumen, forming peptone, or as diastase is capable of effecting the transformation of starch into soluble glucose and dextrin, both new bodies. That these ferments all bear a direct quantitative proportion to the results accomplished, has been practically recognized. We are promised a satisfactory indication of the sources of the acids formed in the plant, which will enable us to corroborate the statements that identical processes go on in the stomach when the ferment is permitted to exert its action there.

The physiological tests now being conducted at the laboratory of Parke, Davis & Co., with the different principles contained in the plant, cannot fail to demonstrate finally not only the superiority of cascara itself, to its former supposed competitor, frangula, but also its comparative value

as a laxative. To physicians desiring fuller information concerning the discoveries made, a reprint of the article from the American Journal of Pharmacy, and a working bulletin descriptive of this drug will be mailed by Parke, Davis & Co., free, on request.

Treatment of Hæmorrhoids.

Dr. John Thad. Johnson, of Atlanta, Ga., thinks (Atlanta Med. and Surg. Jour, March, 1888) the ecraseur has justly lost favor. The ligature is a reliable standby, and is free of danger; but it causes pain and loss of time. The clamp and cautery are equally as good. Treatment by injections aims at the obliteration of the constituent parts of the tumors. These tumors are mostly composed of blood-vessels, and form very nearly erectile growths. The object is to convert this erectile growth into a sclerosis, which change of tissue becomes "absorbed," as the phrase goes. At any rate, there is no longer space for the vessels to swell. The injections should provoke the smallest degree of inflammation that can secure the requisite thickening. If we go too far, the tissues may be entirely destroyed either at once by the too powerful remedy or some hours later by the extent and intensity of the inflammation. The loose tissue around the lower rectum is very prone anyhow to take on suppurative inflammation and abscess and subsequent fistula. There is no question but that even the largest hamorrhoids sometimes yield kindly to injections; and their size or age do not contra-indicate this treatment. But the cure cannot be effected "all at once;" nor can a promise as to cure be so definitely made as by other methods just named unless the patient perseveres as directed, nor is this injection always so safe. Above all, avoid injections of too great strength and of too great bulk, as these errors cause sloughing and dangerous inflammation. The quantity of injection must vary with the size of the tumor, and the surgeon must determine this in each case. Aspiration of the hæmorrhoid of its blood is not apt to prove successful. If extra care be used as to proper dilution and bulk of the injection, two or more piles may be injected at the same sitting. Generally, one injection of each tumor is sufficient; but if not, the injection should not be repeated until after the effect of the preceding injection has worn off. He prefers a five to ten per cent. aqueous solution of carbolic acid, in quantities of from two to six minims for each injection. By observing the principles laid down, it is possible to cure even severe hæmorrhoids with

comparatively little pain or detention from business. But if improperly done, injections may cause more inconvenience

than even the ailment itself.

The class of hæmorrhoids susceptible of this cure includes almost any pile that is a distinct internal growth. He excludes those tumors distinctly external, and also that condition, commonly classed with hamorrhoids, in which a highly vascular condition—an enlargement of superficial capillaries —is present, and gives rise to trouble by its bleeding rather than by its growth. This rather infrequent condition is best met by the application of nitric acid. But with all this said, the fact still stands forth that the ligature and the cautery offer safety of action and certainty of cure unattainable by any other device.

Severe Effect of Cascara Sagrada.

Dr. R. O. Cotter, of Macon, Ga., reports (Atlanta Med. and Surg. Jour., March, 1888) two cases to teach the lesson of caution. Case I was a man, age 60; after several days' constipation, was given at night a drachm dose [of the fluid extract of cascara sagrada?] Not acting by morning, he was given a like quantity, which dose was again repeated about noon. Then purgation began, and closely resembled cholera morbus. The doctor says he has frequently taken the medicine in the manner he here prescribed, and vet he has had no trouble from it. Case II. Prescribed drachm dose for a lady at night. This was followed by severe action, with great prostration and feebleness for three or four days.

Hydrogen Peroxide Disinfectant and Germicide.

Dr. W. D. Bizzell, of Atlanta, Ga., after giving some chemical notes of this agent, says (Atlanta Med. and Surg. Jour., March, 1888) pure H₂ O₂ of syrupy consistence will act as a cautery upon living as well as dead structure. But dissolved in water, even when in stronger solution than is necessary to disinfect the most putrid wound, is entirely harmless, and scarcely more irritating than distilled water. The strong solution in water looks like water, is odorless, and has only the faintest, pungent, slightly metallic taste. A small quantity added to stale urine, egg albumen and water, or dropped on pus or other discharge from wounds, evolves oxygen gas rapidly. When applied to open wounds, or injected into cavities, it causes the same rapid bubbling and effervescence, destroying odor. Miguel's experiences

with variously used germicides showed that only biniodide. and bichloride of mercury were more powerful to prevent decomposition of beaf tea. But properly diluted H₂O₂ being bland, non-irritating and non-poisonous, has advantages, and, on account of its gaseous nature, will diffuse itself into every pocket of a fistulous tract or abscess cavity. But it is costly and difficult to prevent deterioration, and requires to be kept from light, tightly corked, and at a temperature below 70°F. He then reports a case to illustrate the safety of promise of a rapid and permanent cure of suppurative inflammation of the antrum, after drilling through the floor so as more readily to command the cavity, if there be no dead bone, fangs, periostitis-injection into the cavity of a ten per cent. solution of hydrogen peroxide being the remedy. He also reports a case of cure by the same agent of scrofulous abscess of the neck and face; and then the recovery of a case of perinephritic abscess, in which, after the opening incision, a seven per cent. solution of hydrogen. peroxide was daily injected in course of the cut, and the patient was practically well in nine or ten days.

Surgical Cases: (I). Cyst of Labium Majus Removed—Profuse Secondary Hæmorrhage—Revival from Syncope by Atropin and Strychnine. (II). Urethral Stricture and Perineal Abscess—Urethrotomy—Recovery. (III). Symptoms of Calculus Due to Contracted Meatus Urinarius—Cured.

These are headings of cases reported (Atlanta Med. and Surg. Jour., March, 1888) by Dr. Hunter P. Cooper, of Atlanta, Ga. (1). Cocaine injections (ten per cent.) were made around and above the tumor, about size of Guinea egg in left labium majus. Painless incision, about 2 inches long, on outer side of labium; tumor dissected out without cutting into it. An hour or two after operation, a large vein in the bulbus vestibuli ruptured, but could not be found. Hæmorrhage so profuse as to cause several very dangerous attacks of syncope. Ferric chloride styptic and compress checked hæmorrhage. To hold her out of syncopal attacks, hypodermic injections of atropia and strychnia, suggested by Dr. N. O. Harris, acted nicely. (II). Man contracted gonorrhœa, ended in stricture, as the result of a perineal abscess; meatus greatly contracted, as well as membranous portion of urethra. External urethrotomy was performed, and afterwards internal urethrotomy. Antipyrin in 15 grain doses completely controlled the urethral fever. Patient was well in about two months after first operation.

(II). Man 28 years old, had suffered for several years from great obstruction to flow of urine; stream very small and crooked. Micturition frequent, painful, and accompanied by much straining. At times the stream is cut short before bladder is emptied. Occasionally there is considerable blood in urine. When a child he often passed small calculi through penis, causing screams from pain. Meatus admits nothing larger than No. 8 French. This was cut to 34 F. as preliminary to exploring bladder. Spasmodic strictures were also found two inches from meatus, and one at bulbomembranous junction. After meatus healed, passed fullsized sound into bladder twice a week for two months, when all his symptoms had disappeared, and his urine passed in full, bold stream. He remained perfectly well. Not even suspicious sign of stone in bladder or urethra afterwards occurred

Mucous Papillomata with Carcinomatous Degeneration in Rectum.

Dr. J. McF. Gaston, of Atlanta, Ga., reports (Atlanta Med. and Surg. Jour., March, 1888) two cases. At upper end of the rectum are well defined circular fibres in the muscular tissue, constituting a sphincter, which ordinarily retards descent of fæces and gases from large intestine. This superior sphincter is the division between the semi-fluid contents of the colon and the more solid deposition ready for expulsion by defectaion. If this solid matter accumulates above the contractile band, impaction of the lower bowel results; and the tone or capacity of resistance of this structure being impaired, more or less degeneration of the adjoining papillary tissue probably results, which may develop

into indurated masses, forming tumors.

Case I.—Man, age 50 years, had had rectal trouble; was treated by carbolic injections under the impression he had internal piles. No permanent benefit. Hence, exploration with index-finger, which detected an indurated nodular mass around recto-colic junction. Contractility of superior sphincter was destroyed by indurated tissue, and the opening into colon was constricted. Ear-like projections extended from these nodular masses downward into the rectum. The induration extended half way down anterior wall of rectum. There was a sanguino-mucoid discharge, but the speculum revealed no ulceration in the rectum. Diagnosis, mucous papilloma, tending to cancerous degeneration. Prescribed 5 drops Donovan's solution ter die, to

be gradually increased to 10-drop doses. Belladonna ointment 3j, iodine, gr. v, and potash iodide 5ss, applied daily on cotton pledgets to indurated masses, and retained by absorbent cotton tampons. Half-grain opium suppositories in lower rectum relieved tenesmus. This treatment was kept up three weeks, when symptoms of irritation of mucous membrane of small intestines set in. Donovan's solution was suspended. Bismuth subnitrate relieved this disturbance of the bowels. But the softening of the nodules and diminution of their size up to certain point, without any further benefit, he mixed 5j each of iodine, carbolic acid and tannin, with heat, in 5j glycerine, and applied daily with cotton pledgets to the indurated masses. The saliency of the nodules and the sanguinolent mucoid discharge decreased for another month. Then influenza set in, and kept patient from treatment for five days. Examination now revealed considerable increase in size of induration, with reproduction and extension downwards of ear like margins. Return to Donovan's solution, 3 drops 3 times daily. The compound solution was daily applied with camel's hair pencil to the indurations. In two weeks, excoriations caused suspension of this treatment. A week later, half drachm of 4 per cent. solution of cocaine was injected into the tumor on anterior face of rectum. A few minutes later, 15 minims pure spirits turpentine were injected into the same tumor. Intense pain resulted requiring morphia hypodermatically. For a day or two afterwards, pressure in front of anus revealed sensitiveness. Pulse became 90: temperature 101°F. But in two or three days more, the local and general disturbance disappeared. Digital examination revealed a favorable change in the tumor on anterior rectal wall, and the nodular induration is more circumscribed than before the application of the turpentine. In a few days, the Doctor expects to inject the indurated structure higher up the rectum with turpentine, and will report the result in a later issue of the journal. The other case (2) is so much like the first that it is unnecessary to report it in detail.

Aletris Cordial for Menorrhæa, Leucorrhæa, Etc.

MacAdam Gregor, L. R. C. P., of London, reports the case of a widow, aged 32, mother of one child. She had suffered for years, and used many remedies without benefit, when she came under his care, three months ago. Then she was anæmic, weak, had pain in left hypogastrium and sympathetic vomiting, profuse menorrhæa, and copious leucorrhæa during the fourteen days between menstrual re-

turns after ending. In addition, she had irritable left ovary, some prolapsus uteri, urethritis, etc. Under aletris cordial the menorrhœa and leucorrhœa have ceased, and the slight prolapsus gives no discomfort.

Fifty Aphorisms in Pregnancy.

Dr. E. J. Kempf, of Jasper, Ind., states the following fifty propositions (*Amer. Prac. and News*, Feb. 18) which he looks upon as aphorisms:

General Aphorisms.—1. Consider every woman, married or single, who comes for treatment, as pregnant until satis-

fied to the contrary. (Mundé.)

2. Inform yourself all about the former labors, condition of lungs, heart, etc., the presentation, position, condition of child and location of placenta by external manipulation,

several weeks before delivery. (Wilson.)

3. To find day of confinement, take last day of menstruation, say February 10th, count backward three months to November 10th, and add seven days—November 17th. An exact reckoning of date of confinement is impossible, errors

of one or two weeks being sometimes made.

4. Direct pregnant woman to (1) keep bowels regular, (2) diet plain and nutritious, (3) frequent baths, (4) not to get cold or wet, (5), moderate exercise, (6) do usual light housework, (7) be in open air often, (8) not to worry or get excited, (9) dress should be warm, loose, and no pressure on breasts, waist or abdomen, (10) wear an abdominal bandage, (11) bathe nipples in some astringent solution if sore, (12) consult physician for any indisposition. (Mundé.)

5. Moderate coition is allowable during first seven months of pregnancy, and fondling of breasts and nipples by the husband during the latter months is advisable. (Späth.)

6. Signs and Symptoms of Pregnancy.—Morning sickness during end of first month, the second and third months, and sometimes during fourth and fifth months. Occurring after

that, it is probably abnormal. (Mundé.)

7. Menstrual suppression is the rule, but menses may occur during the first, second and third months—rarely afterward. Conception may occur when menstruation is normally absent, as in girls before menstruation is established, after change of life, and during lactation. (*Playfair*.)

8. Beginning of third month, mammary areolæ become turgid, but this may occur in uterine or ovarian disease.

(Playfair.)

9. Abdomen begins to enlarge during third month, and

becomes marked during the fourth, when uterus rises three fingers' breadth above symphysis pubis; during the fifth it occupies hypogastric region; during sixth it rises to umbilicus; during seventh, two inches upward; during eighth and ninth months it gradually enlarges until it reaches ensiform cartilage. About a week before delivery, uterus sinks somewhat into pelvic cavity. (*Playfair*.)

10. Feetal movements start at about middle of fifth month. These may be simulated by irregular contractions of abdom-

inal muscles or flatus within bowels. (Playfair.)

11. Ballottement is of service at end of fourth month to the end of the sixth month. (*Playfair*.)

12. Uterine souffle can be heard at end of fourth month, and

until the term ends. (Playfair.)

13. Fœtal heart-sound can be made out after fifth month, like the tic-tac of a watch under a pillow. The beat is most easily heard when back of child lies to abdomen of mother. Accelerated or irregular beat, preceding or during labor, means danger to child. No relation between the fœtal and maternal pulse.

14. Most valuable signs of pregnancy are feetal heart pulsation, feetal movements, ballottement, and intermittent con-

tractions of uterus.

15. Other signs are dusky hue of vagina, dentalgia, facial neuralgia, tendency to syncope, salivation, unusual gratification during some particular act of coitus. (Muralé.)

16. Unimpregnated uterus measures 2½ inches, weighs one ounce; at term, it measures six times as many inches and weighs twenty-four times as many ounces. Cervix uteri does not shorten except during the fortnight preceding delivery, which is due to incipient uterine contraction. Cervix begins to soften by end of fourth month; by end of sixth month one-half is thus altered; by eighth, the whole of it. Os is generally patulous. (*Playfair*.)

17. Diagnosis of Pregnancy by External Manipulation.—By inspection we may learn whether the abdominal enlargement be of the usual pear shape or broader, as is the case with shoulder presentations. Where twins are side by side, there is usually a depression or sulcus between them, and uterus is broader transversely. If twins be one in front of the other, no difference can be noted in breadth of uterus.

18. By percussion we outline the uterus.

19. By palpation we feel outlines of uterine tumor, prominent parts of the child, round, hard, bony head, the soft breech, the knees, feet, elbows, the round, arched back, and movements of the child.

20. By auscultation we may learn the condition, the presentation, the position, and the sex of the feetus, and the location of the placenta. (Wilson.)

21. Position of feetus is generally head downward; breech

toward fundus uteri. (Playfair.)

22. Spurious Pregnancy.—Pregnancy is simulated by abdominal tumors, obesity, ascites, tympanites, distension due to retained menstrual blood, amenorrhæa, etc. Careful physical examination is only guard against mistake. (Mundé.)

23. Pregnancy Abnormal.—Extra-uterine gestation—early faradic current; late treatment, laparotomy. Molar pregnancy, be it hydatiform, carneous or spurious, calls for complete removal of the mass. Hydramnios may necessitate

premature delivery. (Mundé.)

24. Disorders of Pregnancy.—Vomiting, as a rule, needs no treatment, but, if excessive, is relieved quickest by application of cocaine and vaseline (1 in 50) against os uteri, and 1-16th of a grain of cocaine, internally, frequently repeated. When vomiting resists treatment and threatens to destroy the woman, abortion or premature labor may be necessary, but should never be undertaken without consultation. (Mundé.)

25. Anæmia.—Best treatment is good food, light, air, exercise, iron and arsenic, and removal of cause, if possible.

- · 26. Plethora may call for saline laxatives and restriction of albuminoid food.
- 27. In constipation, direct a regular hour for going to closet; give compound licorice powder, cascara sagrada, or enemata.
- 28. Diarrhea may lead to premature labor. Give paregoric, tincture of catechu, or acetate of lead, opium and ipecae; keep patient quiet.

29. Leucorrhea calls for vaginal washing with carbolized

tepid water.

- · 30. Pruritus—Treat with soda baths, if general; if local, with carbolic acid in glycerine, nitrate of silver in mild solution, cocaine in rose-water, hydrate of chloral in water, etc.
- . 31. Frequent micturition may often be relieved by an abdominal supporter; so also incontinence of urine. Strychnia, belladonna, or cantharides may be tried in both troubles.
- 32. In varicose veins, besides applying flannel bandage or silk stocking, instruct woman how to apply a compress and bandage in case of rupture of a vein, as the hæmorrhage may be great.

33. Diabetes, albuminuria, jaundice, neuralgia, hæmorrhoids, etc., call for same treatment as at other times.

34. Uterine displacements call for replacement, followed

by an appropriate pessary and supporter.

35. False pains may come on at any time, and cannot be told from true pains, except that the former are relieved by opium.

36. High temperature in the mother is not necessarily in-

compatible with feetal life.

37. Immature Delivery.—Abortion is expulsion of ovum before formation of placenta (twelfth week); miscarriage, its expulsion before viability (twenty-eighth week); premature delivery, its expulsion between twenty-eighth and thirty-

eighth week. (Mundé.)

38. Causes of immature delivery are predisposing, dependent on a constitutional affection; exciting, dependent on mechanical or emotional violence. Symptoms are pain, hæmorrhage and dilatation of os uteri. Dangers to mother from sepsis, fatal hæmorrhage, perimetric inflammation, carneous moles. Dangers to child—want of viability.

39. Treatment is prophylactic by fluid extract black haw, and removal of cause; preventive by rest, opium and black haw; in inevitable cases of abortion, empty uterus and check bleeding by rest, ergot, tampon, and after dilatation of cervix

by finger or dull curette. (Mundé.)

40. Miscarriage should be treated like abortion, and pre-

mature labor like labor at term.

41. Artificial abortion is best performed, up to the fifth month, by dilatation of the cervix with the steel-branched dilator; it is done because of (1) persistent vomiting, (2) organic visceral lesion, (3) incarcerated uterus, (4) deformity

of pelvis, (5) presence of large tumors. (Mundé.)

42. Premature labor best induced by catheterization of the uterus—not rupture of membranes, for (1) dyspnæa from enormous distension of the abdomen, (2) hæmorrhage from placenta previa, (3) uncontrollable vomiting, (4) organic heart-trouble, (5) habitual death of the fætus, (6) pelvic contraction of moderate degree, (7) hopeless condition of mother, (8) where in previous labors there have been unusually large children. (Mundé.)

43. Feetus.—Feetus at first month is rarely detected in abortions. At second month, weighs 3j, measures six to eight lines, head and extremities visible, eyes are two black spots on side of head, umbilical cord is straight, clavicle and inferior maxillary bone begin to ossify. At third month embryo

weighs from 70 to 300 grains, measures 2 to 3 inches, forearm is formed, fingers can be traced, placenta is formed. At fourth month, weight from 4 to 6 ounces, length 6 inches, sex of child can be made out. At fifth month, weight 10 ounces, length 10 inches, hair and nails beginning. At six months, weight 1 pound, length 11 to 12 inches, membrana pupillaris, eyebrows. At seven months, weight 3 or 4 pounds, length 13 to 15 inches, eyelids are open, testicles in scrotum, clitoris prominent. At 8 months, weight 4 to 5 pounds, length 16 to 18 inches, nails, membrana pupillaris has disappeared. At nine months, weight 6 to 8 pounds, length 19 to 20 inches, males somewhat heavier than females. (Playfair.)

44. Signs of Death of Fætus are (1) loss of fætal heart-beat, (2) loss of fætal motion, (3) dull weight in uterine region felt by mother, (4) sense of coldness in womb, (5) putrescent fæ-

tor in discharges, (6) discharge of flatus from uterus.

45. The Placenta, Liquor Amnii, Etc.—Placenta supplies nutriment to and aerates blood of feetus. It may be anywhere in uterine cavity. Umbilical cord is channel of communication between the feetus and placenta. The placenta at full term is a mass, containing a great deal of blood; spongy in texture; about seven inches in diameter; usually oval; one surface smooth, facing the cavity in which the feetus lies, the other surface rough, fastened to the walls of the uterus. Color is redish, but varies in tint according to condition of blood.

46. Liquor amnii, secreted by amnion and allantois, affords a medium in which fœtus floats, and saves uterus from injury from movements of fœtus; in labor it lubricates the passages. It has nothing to do with nourishment of fœtus.

47. Uterine and placental murmurs are not usually no-

ticed in diagnosis of pregnancy.

48. Knots in umbilical cord are brought about by passage of child through a loop in the cord, generally during labor.

49. In twins, triplets, etc., there may be one placenta or more than one. If two feetuses, these may be joined by two cords to one placenta. This cannot be made out during

pregnancy.

50. Maternal impressions, monstrosities, marks, etc., are result of arrest of evolution due to pressure by amniotic bands, by umbilical cord, adhesions of placenta, or to some pathological condition of fœtus or its membranes, or to heredity.

Intestinal Obstruction—Treatment.

Dr. Robert N. Taylor, of Tollesboro, Ky., after reporting six cases (Amer. Pract. and News, Feb. 18), makes the follow-

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Remarks.—The teaching of these cases adds emphasis to withholding purgatives and giving opium or morphia in cases of intestinal obstruction. Whatever the kind or character of obstruction, to whatever cause due, only harm can come from giving purgatives. The more insurmountable the obstruction the greater is the harm done, as illustrated in the autopsy upon the case of stricture of sigmoid flexure. No one who had seen the conditions there presented would ever want to give purgative medicine in a case of intestinal obstruction.

While obstruction due to more trivial causes do better and are rendered more comfortable by opium, they are more safely conducted to a favorable issue by the "splinting" treatment of opium than by the whipping, lashing treatment of purgatives. The opium treatment with irrigation, and in some cases probably massage, is the best that we can do for

these cases, short of laparotomy.

Irrigation, judiciously employed, is a most valuable aid, second to none in many conditions. The matter should be carried up the colon by a long rectal tube, allowing a little to escape at the end, so as to distend the gut in front of the advancing tube. By this means a tube, or rather a soft, flexible rubber pipe may be passed through the entire length of the colon, down into the cecum, delivering the fluid there, and affording the surest means of passing water through the ileo-cecal valve, if desired. The common, stiff, hard rectal tubes sold in the shops are worthless, and worse, are dangerous, and should not be used under any circumstances. A piece of soft, flexible rubber drainage-tubing, the end beveled with scissors, 24 to 36 inches long, answers every purpose, and makes an excellent instrument.

Peroxide of Hydrogen,

According to Dr. I. N. Love, of St. Louis, Mo. (Progress, March, 1888), was discovered in 1818. Its formula is H_2O_2 . In 1863, Meissner proved its presence in rain-water collected during thunder storms. The usual preparation of a solution of hydrogen peroxide depends upon the decomposition of barium peroxide by either muriatic, carbonic or hydrofluoric acid in ice-cold water, and the precipitation of the newly-formed barium chloride by means of sulphate of sil-

ver. Such solutions usually contain from 3 to 5 per cent. of the peroxide, and are concentrated by freezing—the last portion of water being evaporated in vacuo over sulphuric acid at a temperature not exceeding 68°F. In this form it is an odorless, colorless, transparent, syrupy liquid, with a harsh and bitter taste, sp. gr. 1.452, does not congeal even at -22°F., but volatilizes slowly and without decomposition at ordinary temperature. It is soluble in water in all proportions. It decomposes if exposed to sunlight, or heated, or brought into contact with charcoal, silver, gold, platinum metals, manganese oxides, alkalies or other compounds. Under favorable conditions it decomposes with explosive violence, and reduces to the metallic state in the presence of oxides of the metals mentioned. The skin may be turned white by its application, accompanied by itching. It is a powerful antiseptic and destroyer of microbes, and hence its great value in cleansing purulent surfaces, deep cavities, etc. Dr. Love then cites his experience with it in a case of purulent diphtheria following scarlet fever. He applied hydrogen peroxide solution (1 part to 2 of water) with a syringe to the nasal cavities and by absorbent cotton probang to the throat, and it cleaned away the pus and accumulated mucus as if by magic. Then it was applied directly to the diphtheritic membrane, and after repeated applications, its disintegration was accomplished in a very decided manner. Wherever the solution came in contact with organic matter, a marked effervescence and bubbling ensued, and a breaking down of the accumulation or exudation and throwing off of the same occurred. Spasmodiccoughing subsided after the removal of the purulent secretions from the nasal passages. Six similar cases came under his experience. It is not claimed that this hydrogen peroxide solution has more than a local benefit in diphtheria, but that benefit is a very decided one. Applications three times daily of peroxide of hydrogen solutions (of strengths varying from 1 to 3 to 1 to 6 in water) are recommended in purulent ozena and chronic nasal catarrh. In acute coryza, syringe the nostrils gently, once in four or six hours, with about two tablespoonfuls of four-per-cent. solution, while the head is thrown backward. A free sneezing and perfect discharge follows. In whooping cough, the use of a four-per-cent. solution [but how is not stated] has done good.' Reflex asthma has also been promptly relieved after a few applications of a like solution. A three-per-cent. gargle is good in follicular tonsillitis. In uterine cancer, the

application in pure state is an excellent cleanser and deodorizer, and encourages any healing tendency that may exist. It has also been successfully used to remove pigment spots from the skin. This is the main application used by weak-minded women in blonding the hair. It is worthy of trial in gonorrhea.

Conjunctivitis—Treatment.

Dr. Dudley S. Reynolds, of Louisville, Ky., speaks on this subject (*Progress*, Feb., 1888). After giving notes on the pathology of mucous and muco-purulent conjunctivitis, of pseudo-membranous conjunctivitis, etc., he mentions that the severer applications have now become discarded. In their place, the object now sought is frequent and thorough clearing away infected matter from purulent conjunctivitis, so as, on the one hand, to dislodge microbes before they have time to colonize, and on the other, make thoroughly sterilizing applications to the surface of the membrane, without adding irritation. Dr. Williams, of Boston, has demonstrated that such mild agents as chloride of sodium, borate of sodium, etc., are preferable to caustics.

Effects of Nasal Polypi.

Dr. Jacob S. Coleman, of Forks of Elkhorn, Ky., reports a case (*Pragress*, Feb., 1888) of nasal myxomata to illustrate to what extent they can multiply, and how they cannot only destroy mental tranquility, but seriously affect health. In all between 50 and 60 tumors were removed, with great improvement in most of her complaints, such as cough, headache, deafness, etc., beside the direct physical condition of swelling of the nose, oral respiration from occlusion, modification of voice, loss of sense of smell, etc.

Antiseptic Midwifery.

Dr. Fayette Dunlap, of Danville, Ky., has a good review article on this subject (*Progress*, Feb., 1888), in which he advocates the doctrines of Semelweiss. He rather inclines to the sole view of heterogenetic origin, and thus recommends thorough asepsis of patient, attendants, clothing, etc. The time-honored custom of using some old cast-away quilt on the bed under the patient should be abolished, and in its stead material known to be thoroughly aseptic substituted. When there is the slightest ground for fear that there may be contamination with *anything* relating to scarlatina, diph-

theria, erysipelas, etc., use bichloride of mercury solutions of proper strengths and by proper means of application. Do not wait to see whether the poison is going to enter; be sure to keep it out. If there is feetid vaginal discharge, even, use intra-uterine injections with mercurial solutions. Catheters, forceps, fingers, etc., should all be thoroughly washed in antiseptic solutions before being used. Remember that even normal labor is a species of traumatism, and leaves the surface prepared as a suitable soil for the reception of the germ. Rather than assert any belief of his own as to the autogenetic theory, he quotes from the now memorable writings of Parvin, who does not believe in any such doctrine.

Hypertrophy of the Brain.

Dr. John A. Larrabee, of Louisville, Ky., reports the case (Progress, March, 1888). The child, when 16 months old. weighed 36 pounds; but his tissues were thick, features blunt—what many call strumous. Head broad and flat on top; occiput bulging, posterior fontanelle closed, anterior fontanelle rather depressed, with some prominence of edges. Measured 11 inches over top and 19 inches in occipitofrontal circumference. Totally blind; pupils dilated and fixed. Animal functions normal, appetite good, but bowels constipated. Dentition fully up to his age. The body was covered with silky hair. This is cætérés paribus, a verv strong point in diagnosing the scrofulous diathesis, just as freckle-face in children is for tuberculosis. When 13 months old, the child had a severe convulsion, followed by a febrile condition. The convulsions and febrile exacerbations were repeated at short intervals—one convulsion lasting seven hours. The size of head now attracted attention, which he could not support in erect position; he was also unable to stand, although able to move limbs freely. Hydrocephalus chronica was diagnosed by the physician, and there is a resemblance to it. He then became blind gradually. Such was the history a year ago at the clinic. He is now about 35 months old. He is still unable to walk, though he tries. He sits very well. and does not roll his eyes. Vision has returned. The skull is more firmly ossified, but measurements are the same. Teeth natural. Weight 35 poundsone pound less than a year ago. The disease of this child is hypetrophy of the brain.

It is to be diagnosed from hydrocephalus. In this latter, the fontanelles remain widely open, even extending into the frontal bone, and the bulging is frontal more than occipital, with an increase of the fontanelle, making the head contrast strongly with the lower part of the face. If the hydrocephalic fluid is within the ventricles, it presses the brain upwards, and so changes the orbital plates of the osfrontis as to make them perpendicular instead of horizontal, and the eyes, partly covered by the lids, are turned downward, showing the white sclerotics above. This is diagnostic of that condition, except in those rare cases where the fluid is external to the brain, and the pressure is from above downwards, in which cases, of course, the axis of the eyes is not changed. In hypertrophy of the brain, the greatest measurement is across the parietal bones (top of the head) and the bulging occiput.

In brain hypertrophy, the ventricles contain little or no fluid. The convolutions are flattened, and the sulci partially obliterated. If the brain were removed from the calvarium, it would be difficult to replace it in the skull. This pressure of the brain against the skull destroys its nutrition. There is probably an albuminoid infiltration of that structure. Such is Rokitansky's view, at least. At all events, the hypertrophied brain presents a white, glistening appearance, and hardens as if by maceration in alcohol.

As to treatment, this child has had potassium or sodium oidide, with muriate of ammonia, in steadily increasing doses three times a day for a year. Continue same treatment. Constipation relieved, when required, by calomel.

Defective Vision in the Young Resulting from Over-Crowding of Students

Is the title of an excellent practical paper on over-pressure of studies on children in public and private schools by Dr. J. H. Smith, of Dallas, Tex. (Tex. Cour. Rec. Med., March, 1888). The system of "cramming" the young mind, so much in vogue now-a-days, is not to be sanctioned. Rooms should be properly lighted; desks should be adapted to the size or height of the child, and the amount of study should be proportioned to the capacity of the child. Recreation at proper hours is absolutely essential. The Kindergarten system is, in a great measure, advocated. The overpressure of the studies soon manifests itself in the general appearance of the child. The skin becomes pale and flabby, appetite is lost, indisposition to out-door recreation develops, headaches and pains in various parts of the body become common, and if the female is old enough, the menstrual

function becomes disturbed, with its long train of sequences. Headache is the most common complaint from the excessive and improper use of the eyes, which soon develops "errors of refraction," compelling the use of glasses to overcome myopia or hyperopia. Astignatism in its different forms and combinations are often added, but this latter may be due to conginital malformation. The doctor does not propose to add anything new to the already abundant literature of the subject, but simply to add his endorsation to what has been so often well said by other doctors on the same subject.

Ipecac Enemata and Ice-Water Enemata for Dysentery.

Dr. J. F. Campbell, of Brookston, Tex., states (Tex. Cour. Rec. Med., March, 1888), that he has had the happiest results from the use of ipecac administered per rectum in the treatment of dysentery. He generally injects well into the rectum from thirty to sixty drops of the fluid extract of ipecac diluted with two or three drachms of water, and repeats the dose every six, twelve or twenty-four hours, as required to control the tormina, tenesmus and bloody discharges, of which there is generally but little after the first enema. Should the first injection be evacuated immediately after its introduction, he at once administers another dose, combined with laudanum, and makes the patient retain it by pressing the buttocks together. Usually, in a few hours, there is a free evacuation of the contents of the bowels, with a copious discharge of the bile. Sometimes, however, it is necessary to use sulphate of magnesia or castor oil to clean out the alimentary canal. He has never seen but one case of vomiting occur as the result of this use of ipecac, and he doubts even if this case was due to the medicne. There has been no marked prostration in a single case. Such other medication as may be necessary can be given per orem.

Another excellent treatment of dysentery consists in slowly injecting into the bowels a pint or more of ice-water, to be repeated, as in the ipecac treatment, with ten grains

of salol by the mouth, every two to six hours.

Antipyrin in Excessive Fœtal Motion, and in Uterine Neuralgia,

Dr. A. P. Brown, of Fort Worth, Tex. (Tex. Cour. Rec. Med., March 1888), has been using antipyrin hypodermic tablets (Parke, Davis & Co.) for neuralgia, sciatica, headaches, morphine habit, etc., with good results. In a recent case of threatened abortion, it acted beautifully, having had also

a remarkably quieting effect on the uterine pains and neuralgia. It also quieted the activity of the fœtus in utero to such an extent as to cause-apprehension, but in a few days the motions of the fœtus began again, but there was great relief from the former distress of the woman.

A Case of Fracture of Humerus from Muscular Contraction

Is reported by Dr. C. F. Paine, of Comanche, Tex. (Tex. Cour. Rec. Med., March, 1888). A non-muscular man, æt. about 35, with unusually small bones, while in the act of throwing a base-ball, fractured the humerus at the junction of the middle and lower thirds, the snap being plainly audible to those around him. The doctor at once reduced the fracture, securing the ends in proper apposition with sole leather splints and roller bandage, after the usual plan. Results were satisfactory, without any shortening or deformity.

Etiology of Croupous Pneumonia.

Dr. C. O. Mathews, of Daingerfield, Texas, defines (Tex. Cour. Rec. Med., March, 1888) croupous pneumonia to be an acute inflammation involving the alveoli of the lungs, resulting in infiltration of the vesicles of one or more lobes with inflammatory products. He thinks the weight of evidence is in favor of a specific cause of pneumonia—a specific virus. This pneumonic virus consists of micro-organisms, of which several varieties have been described by Prof. Weichelbaum, of Vienna, to-wit: diplococcus pneumoniæ, consisting of oval eliptical and round cocci, which occur in chains as well as in pairs; the streptococcus, which greatly resembles the first, but is distinguished by its greater uniformity in spherical shape; the staphalococcus; and the pneumococcus, described by Friedlander, which consists of rods of different lengths. Like other microbes, these cocci develop in the lung, not in health, but only under favorable conditions.

Antiseptic Treatment of Intestinal Diseases,

The majority of intestinal disorders, says Dr. W. N. Rogers, of Belton, Texas, (Tex. Cour. Rec. Med., March, 1888,) are purely dyspeptic in character, and due primarily to fermentation and putrefaction in the alimentary canal. This is especially so in the summer diarrhea of children. In the large hospitals and dispensaries of New York city, where about 40,000 children are treated annually, the opinion is almost unanimously in favor of the antiseptic plan of treatment for bowel

diseases. Under the old plan only about one-half of the young patients were cured, while under the antiseptic plan one high authority lost only about one per cent. In Dr. Rogers' experience this antiseptic treatment has been equally as satisfactory. Salicylate of soda and salol are among the best agents in these diseases, especially in combination with bismuth. First cleanse out the bowels before giving the antiseptic treatment. Among other agents that are useful are salicylic acid, carbolic acid, creosote, naphthalin, iodoform, bichloride of mercury, etc. Such agents stop decomposition in the bowels and restore healthy action. He says he has never had, in eleven years' practice, a case of hæmorrhage from the bowels in typhoid fever, because he uses this antiseptic treatment.

Hypertrichosis.

Dr. A. H. Ohmann Dumesnil, of St. Louis, Mo., reports the case (*Progress*, March, 1888) of a car conductor, æt. 30, with strong growth of dark brown hair. When about 16, he fell from the shrouds of a vessel, on deck. Simple rest was the treatment. After getting well, an oval shaped growth of hair began in the lumbar region, about 3 inches in diameter. This hair is soft, curly and brown. As he trims it off, it is not known how long this hair would grow. He says some of it has been 3 feet long before cutting it. No external applications were made as a cause of this hairy growth. The recognized causes of hypertrichosis are heredity, neurotic influences and cutaneous irritation. But neither of these causes apply to this case. It is a curiosity in this respect.

Deviations of the Septum Nasi.

Dr. Thomas Hunt Stucky, of Louisville, Ky., has a full article on this subject in *Progress*, March, 1888. Of 117 dried skulls examined, Theile found 73.5 per cent. of the septadeviated. In the majority of cases the deviation is toward the left. Up to the 7th year of age, the septum is always straight. The cause for the deviation of the bony septa after this age is obscure. Always blowing the nose with the handkerchief in the same hand, or habitually sleeping with the face on the same side of the pillow may account for deflections of the cartilaginous septa. But the septa have other deformities than deflections, such as a ridge along the line of junction between the vomer and palatal junction, or along the cartilaginous septum itself. In treatment, the object is to restore normal nasal respiration. The secret of

success with Bosworth's saw is that it makes clean, smooth cut surfaces. It is a good plan to plug thoroughly with absorbent cotton the side operated on, so as to control hæmorrhage, make gentle pressure on the denuded surface and stimulate granulation. The pathology of these deflections is obscure. He has no experience with Jarvis' method, but quotes his description of the operation.

Cocaine and Higrine.

Dr. Frank Trester Smith, of Chattaneoga, Tenn., has a paper on this drug (Atlanta Med. and Surg. Jour., March 1888), in which he speaks of its value especially in eye, nose, and ear troubles. He says one case of death from 3 grains of the drug is reported. Generally the salt comes as an amorphous powder; but Messrs. Parke, Davis & Co., make it in large and small crystals. The large crystals are freest from the irritating principle (higrine) which so smarts the eye when a solution of amorphous cocaine is dropped in the eye. Higrine is found in the coca leaf, and is best gotten rid of by repeated crystallizations of the cocaine. Higrine has odor of bitter almonds, and the amount of odor is a ready test of amount of higrine in a given solution. Higrine has never been isolated; hence we know nothing about it.

Pelvic Hæmatocele.-Case.

Dr. Virgil O. Hardon, of Atlanta, Ga., reports a case (Atlanta Med. and Surg. Jour., March, 1888) in a married lady aged 36, voungest child aged 3 years, occurring suddenly while engaged in household work. Pain intense in lower abdomen; collapse. Dulness on percussion across abdomen upwards to a line midway between umbilicus and pubes. A rounded, bulging, fluctuating tumor was felt behind cervix uteri. Per rectum, as far up as the finger could reach, this fluctuating mass was more distinct. Peritonitis set in by third day, temperature was 104.6°, pulse 144. Morphine treatment successful in about ten days. But a rounded tumor projected into posterior fornix of vagina, and surrounded and immovably fixed the uterus. A recurrent peritonitis took place in a few days, but not so severe; same treatment. Able to sit up in two weeks; and two weeks later she returned to household duties, although with hypogastric tenderness, while the hard mass could be felt through Douglas' pouch. A fortnight later, she passed per rectum about a teacupful of black offensive decomposed blood mixed with pus. Vaginal examination the next day showed entire disappearance

of the mass. After that she enjoyed uninterrupted good health. Thus the diagnosis was based on (1) sudden and profound collapse; (2) subsequent acute peritonitis; (3) effusion into pelvic cavity which soon solidified into a hard resisting mass; (4) passage from the bowel of decomposed blood, mixed with blood, coincident with disappearance of the remains of the pelvic effusion.

Alvine Fluxes of Infants.

Mr. Charles M. Rosser, of Ray, Tex., publishes the thesis on this subject (Amer. Prac. and News, March 17) for which he received the "Whitsett gold medal for the best thesis written by any student of the Medical Department, University of Louisville," session of 1887–8. The paper is a very good one. It considers only three of the fluxes, namely, cholera infantum, infantile diarrhea and infantile dysentery. The paper gives a good review of the writings of some of the standard authorities on the subject, and includes notes of some cases which have come under his own observation.

Three Cases of Pneumonia.

Dr. T. B. Greenley, of West Point, Ky., says (Amer. Prac. and News, March 17th, 1888) he has been practicing medicine forty-one years, but never before saw three cases of pneumonia in the same family and house at the same time. The cases were the mother (which terminated fatally) and two sisters—aged respectively seven and nine years, whose cases terminated in recovery. The peculiarities of these cases were the excessive high temperature in the outset of the attack, and the deferred local manifestations of the disease. We rarely see a higher temperature in pneumonia than 104° or 105° F.; but in one of these children it was 107°, and in the other child and mother it was 106°. The local phenomena of the disease were not manifest in one of the children until the fifth day; in the other two cases, there were no physical signs until the fourth day, whereas it is usual to have these signs develop by the second or third day. Such histories tend to confirm the view of some modern writers, that pneumonia is a systemic or constitutional disease manifested by local phlegmasia.

Treatment of Mastitis.

Dr. J. S. Westerfield, of Greenbrier, Ark., after referring (Amer. Prac. and News, March 17) to an article in the same

journal (Vol. I, No. 2) by Prof. D. W. Yandell; on the same subject, reports several confirmatory cases. The treatment consists in compression of the diseased breasts by means of rubber plaster bandages, after introducing horse hair for drainage purposes if necessary. Relief of pain follows usually in twenty-four hours, and appetite returns in about same time. Generally the plaster can be removed in about ten days or two weeks, and the patient discharged well.

Book Notices.

Lectures on Diseases of the Heart. By ALONZO CLARK, M. D., LL. D., Emeritus Professor Principles and Practice of Medicine, College Physicians and Surgeons, New York, etc. New York: E. B. Treat. 1887. Demi 8 vo. Pp. 251. Price, \$2.75. (From Publisher).

This book presents the substance of lectures on diseases of the heart, delivered during the author's active connection as Professor with the College of Physicians and Surgeons for many years antedating 1884. His earnest studies and direct investigations have ever given a special value to the records he has left of his life's work. "Being dead he vet speaketh." The present is a full monograph on diseases of the heart chiefly from a clinical standpoint, and helps to establish upon the platform of the fixed principles in medicine many points as to percussion and auscultation of the chest. Also as a therapeutist, Dr. Clark has left advice which is very useful, bearing the approval of his ripe experience, close observation and attentive study. The book gives many facts concerning deformities of the heart, functional disorders, etc., all of which are of frequent importance to the practitioner in his daily rounds of practice. This book is necessarily standard because of the great ability of the author, and the accuracy which marks all of his contributions to medical science.

Essentials of Chemistry and Toxicology for the Use of Students in Medicine. By R. A. WITTHAUS, A. M., M. D., Professor of Chemistry and Physics in University of New York, etc. Second Edition. New York: William Wood & Co. 1888. Cloth. 16mo. Pp. 294.

The first edition of these *Essentials* were published in 1878. Since then, advances have been so rapid in chemistry as to require rewriting of so many sections of the book,

the rearrangement of others and the addition of new matter, that the present is practically a new work. Sections on toxicology have been introduced. The style of the book is to ask a question and to answer it. Hence it is not a text book, but a very serviceable work for review purposes, and also as an aid to the lecture course. This little volume is especially useful to the *medical* student—especially to him who is studying the effects of drugs, and the treatment of their toxic action.

Atlas of Venereal and Skin Diseases. Edited by PRINCE A. MORROW, A. M., M. D., Clinical Professor of Venereal Diseases, Formerly Clinical Lecturer on Dermatology, Medical Department of University of the City of New York, etc. New York. William Wood & Co. 1888. Large folio. In Monthly Parts, Each Containing 5 folio, Chromo-Lithographic Plates, and from 16 to 20 folio Pages of Text. To be Complete in Fifteen Monthly Parts. \$30. for the Set, payable in \$2. on delivery of each Part or Fasciculus. (From Publishers.)

The publication now begun has been in contemplation by the publishers since 1883. The co-operation of the leading dermatologists and syphilographers of the world has been enlisted in this stupendous publishing enterprize. A most able Editor has been selected, as will be conceded on all hands; and in the names of such contributors as Professors Kaposi, and I. Neuman, of Vienna, Fournier and Hardy, of Paris; Drs. Hutchinson, of London; Ricord, Cullerrier, Besnier and Vidal, of Paris; Keyes, Otis, Piffard, of New York; Hyde, of Chicago, etc., will be recognized authorities whose writings and drawings will forever establish this Atlas as the standard treatise in the language of any nation. In illustrations, the chromos and drawings are as nearly copies of nature as it is possible for pictures to be; in text, the descriptions are plain, including chiefly those features which are most practical, omitting in great measure pathological and other considerations which more properly are to be looked for in systematic text books; but sections on prognosis, treatment, etc., are added to each subject brought to the attention of the reader. It should be remembered however, that this Atlas is not intended to supplant text books on venereal or skin diseases, but to serve as a faithful representation of the picture which any text authority may attempt to make in words. It is not the geography but the map, with full explanatory notes. So that this Atlas is suited as a fit companion for any authoritative monograph on venereal or skin diseases. Now that this magnificent work is being published, we cannot see how any professor or teacher or special student of venereal and skin diseases can afford to be without it. Our advice is, subscribe at once.

Fasciculi I, II and III are already issued. The five plates of Fasciculus I represent respectively chancroids, phimosis and paraphimosis in various stages of development, on different parts of the external organs, male and female, as also buboes of the groin—in all 27 figures beside a number of wood-cut drawings. Fasciculus II shows chancroids and chancres, erratic chancres, vaccination chancres and chancre with maculo papular syphilide—in all 22 figures. Fasciculus III illustrates in chromo drawings, chancre of fore-finger with syphilide of palm, chancre of female nipple with roseola, erythematous syphilide, miliary syphilide, papular syphilide with precocious ulcerative lesions and papulo-pustular syphilide—in all six chromo drawings.

Modern Treatment of Headaches. By ALLAN McLANE HAM. ILTON, M. D., of New York. 1888. George S. Davis, Detroit, Michigan.

This is No. 6 of "The Physician's Leisure Library" for 1887—which, according to announcement, should have been issued last November. We have so often commended this annual series—\$2.50 a year or 25 cents a copy—that we trust our readers have subscribed. The present issue is on one of the commonest ailments for which the physician is called, and yet it is seldom that the doctor knows how to diagnose one variety from another. This book enables the practitioner to diagnose and to prescribe with some degree of satisfaction. The classification adopted by Dr. Hamilton consists of congestive, anemic, organic, toxic, neuralgic and neurasthemic headaches, and he discusses each variety with a good deal of practical interest in these 124 demi octavo pages. A number of "new remedies" are brought to the attention of the reader.

Editorial.

Preparatory Schools for Medical Students.

Now that State Boards of Medical Examiners are becoming established, empowered to grant licenses to practice only to those who pass satisfactory examinations before them, regardless of the diploma granting authority, attention is being painfully directed to the great lack of preparatory med-

ical education. In the days of our fathers, pupilage in the office of some educated doctor was the custom before entering a medical college, and it was expected that under such preceptorship the student would gain such primary education at least as would qualify him for the more advanced teachings of the college. But "the war between the States" not only broke up this time-honored custom, but also threw into our colleges a large number of students who not only did not have preparatory medical education, but scarcely any primary scholarship of any kind. Sympathy or other feeling akin to sympathy grew up on the part of teachers because of the lack of opportunities on the part of students fresh from the battle-field, and "allowances for the surroundings" were freely made, both North and South; and it cannot be denied that many have graduated from highly respectable colleges that, in the light of present progress, were not fitted for the task of the practitioner. The registrations of preceptors at the time of matriculation became a formality, and the uselessness of this formality soon became so apparent that, for the most part, it has now been entirely discontinued.

This general lowering of the standard of graduation was early taken advantage of, and less worthy colleges used the advertisement of speedy and easy graduation as a "drummer" for students. Then medical college after medical college sprang into existence all over the country, apparently for no other purpose than to attract big classes and to send forth almost every applicant for graduation with a diploma, in the hope that the incompetent M. D. would so recognize his incompetency to battle with the major diseases as to force him to send the better pay class of his patients to the professors of the "dear alma mater."

Editorial drawers rapidly filled up with rejected trash, and the competent of the profession soon became cognizant of the weakness—of the absolute ignorance—of those with whom they were called upon to associate in consultations, etc. The once influential position of the neighborhood doctor, because of his higher degree of education than of those around him, was lost among the people, because they recognized in him a low degree of qualification as to even the elementary branches of medical sciences; and thus it became more and more a necessity, for some of the States at least, to establish protection for themselves in the shape of State Boards of Medical Examiners.

But the establishment of such Boards of Examiners, if it

has done no other good, has lifted the standard of professional requirements. It has brought to adoption a system of preparatory schools for medical students, which, being more systematic, are even more valuable than the ante-bellum system of office preceptorship. No promise nor effort is made to graduate the student. It is only intended in these preparatory schools to teach and drill into him those elementary studies and principles which are essential upon which to base a proper medical education and to prepare him for a medical college. Of course the facts learned in such preparatory schools are practical facts learned for all time; and hence these schools can be made available by the doctor who wishes to review his studies in order that he may become the better informed or else prepared to enter upon examinations before boards of medical examiners and for such positions as surgeons in the army, navy, etc.

We should not close these remarks without directing special attention to the advertisement in this issue of the "Preparatory School for Medical Students" at Davidson College, N. C. Dr. Barringer and his associates are too well known for their special fitness for their task to need a word of commendation at our hands. We trust this school will be liberally patronized. It is as good for students from this and neighboring States as it is for those from North Carolina.

"Fairchild's Pepsin"

Is becoming so well established in professional favor on this continent that it is gratifying to learn that it is likewise assuming the highest rank in European countries. As bearing on this subject, Messrs. Fairchild Bros. & Foster give in their advertisement (fourth cover page) an excerpt from a lecture by William Murrell, M. D., F. R. C. P, which is the more valuable in that it was spoken entirely independent of any influence of the manufacturers and proprietors, they not even possessing the acquaintance of Dr. Murrell.

Western Pennsylvania Medical College-Graduates.

Thursday, March 24th, 1888, was a cheerful occasion for many friends of the Western Pennsylvania Medical College in Pittsburgh. The Grand Opera House was crowded with those on hand to extend congratulations and to aid in commemoration of the second annual commencement. Thirty-four graduates received the degree of M. D., being an increase of exactly 50 per cent. above last year's number. After the invocation by Rev. Dr. Cowan, the valedictory address was

delivered by Prof. James McCann, President of the Faculty; next an address by the First Honor man of the class, Dr. W. S. Plotner. In the evening, at the Seventh-Avenue Hotel, faculty, alumni and guests, to the number of 150, partook of some of the "good things" of life. The post-prandial toasts were responded to in the happiest way by Dr. Thos. McKennan, of Washington; Dr. Stewart, of Erie; Dr. Ferree, of the class of 1887; Dr. Batkin, of the class of 1888; Prof. Lange, of the Faculty; Joseph Albree, Esq., of Alleghany City; Rev. Dr. Cowan, and others. The reunion was thoroughly enjoyed by all and fitly closed the second successful year of this new medical college.

The Medical Examining Board of Virginia

Will hold its spring session (1888) in the hall of the House of Delegates, at Richmond, beginning at 8 P. M., April 17 (Tuesday). Members of the Board are earnestly requested to be prompt in attending the session. Applicants for examination will please present themselves at the same place at 8 A. M., Wednesday, April 18th. Punctuality is essential, as the session only continues on the 18th and 19th, and those failing to complete the examination can have no further opportunity for three months after the dates specified.

[Signed] H. GREY LATHAM, M. D., Pres. Med. Exam. Board of Va.

Official: Hugh T. Nelson, M. D., Sec. and Treas.

We regret exceedingly the above notice was not received in time to be of service to those of our readers who may be depending on such notice.

The Fifteenth Annual Volume

Begins with this issue. The unique feature begun last April will be continued. This feature consists in giving synopses each month of every original article contributed the month before to all of the many regular medical journals published outside of Virginia, in each of the Southern and Southwestern States, including those published in Kentucky and Tennessee. The many advantages of this feature are, for the most part, apparent on mention, and have been generally appreciated by the profession wherever it has become known. It is impossible for any one doctor in practice to read all of the several excellent journals published in the territory named. In the North and West, there are many who are anxious to know what is being regularly contributed to medical science or practice through the Southern

journals. They cannot take all, and therefore take no Southern journal. But the "new feature" of the Virginia Medical Monthly, as above alluded to, obviates this difficulty. It gives synopses of every article published in all these journals, and gives precise references, so that the reader who wishes to see the original article knows where to look for it. The "new feature" gives all in one journal. Of course all the other usual departments of regular medical journals will be continued as heretofore.

We have a request to make of authors of papers appearing in the several journals alluded to. It is, that, as soon as a writer hears that his paper is accepted by any of the regular medical journals referred to for publication, he will at once prepare a brief or a symopsis of his paper (after the order of the synopses to be found in this issue), and immediately forward such brief or synopsis to the Virginia Medical Monthly. The observance of this request will greatly benefit the authors of papers as they then can bring out in their synopses the points they think most important, and thus will fairly and fully represent their views. For if such synopses are not prepared by the authors of papers in Southern journals, briefs will be made of them and published in this journal. We are anxious to have these synopses appear according to the approval of the respective writers, and we know of no surer method of securing such a result than to get the authors to prepare synopses of their own articles.

Vaccinate at Once.

Again we caution our subscribers as to the dangers of delay to vaccinate such of their patients as are unprotected from smallpox. Smallpox seems to have got a firm hold upon San Francisco, and a number of cases have occurred east of that city. There were 105 reported cases of this disease in San Francisco alone during the month of February; and how many cases were not reported we cannot say. But with the existing direct communications between that city and many Eastern cities, it is not unreasonable to suppose that danger is great to the unprotected in the latter cities. The New England Vaccine Co., advertised in our journal, and for which Mr. T. Roberts Baker, of Richmond, is the Virginia agent, furnishes excellent, guaranteed vaccine points.

Tobacco Smoking

Has become so universal throughout the civilized world

that tobacco has almost become one of the necessities of life. The civilian in all stations of social and business life uses it: it is required as a part of the rations of the soldier or sailor: and the experience even of medical officers in our insane asylums has shown that the issue of tobacco to the inmates of these institutions is conducive to their comfort and health rather than otherwise. But of the several forms of smoking, so long as the habit is moderately indulged, we are often called upon to contradict the statement that cigarette smoking is the most injurious. On the contrary, if the cigarette is made of pure tobacco and is not too closely smoked up—if the nicotic oils and solutions that result from the moisture of the lips while smoking are kept off the buccal mucous membranes—if the smoke is not swallowed nor exhaled through the nostrils—then there is no reason to believe that moderate cigarette smoking is as injurious as continuous cigar smoking. An important error made by many smokers is frequent spitting. Such a habit in smoking not only destroys the pleasure of the smoke, but sooner or later brings on dyspepsias with all their train of evil consequences upon the nervous system. It is important also for smokers to select pure tobacco—either for the pipe or cigarettes; and we are glad to see from the April No. of Health, a popular journal of hygiene and sanitary science published in New York city, that the finest smoking tobacco in the world is now being made up in our city, and that the verdict of the outside smoking world corroborates the views generally expressed by users of the weed in Richmond, that Messrs. Allen & Ginter take the lead of manufacturers of pure smoking tobaccos and cigarettes. No firm can be more careful in the selection of the best material or more strictly watchful as to every detail of perfect cleanliness in manufacture. the firm to which we alluded in our March No. as setting an example worthy of being followed by large manufacturers all over the country in making ample provision for the medical care of its operatives, who number about a thousand, instead of 500, as our printers put it last month.

The Journal of the N. E. Va. Medical Society

Is a monthly of about 20 or 24 pages, published at Bethel Academy, Fauquier county, Va., under the business management of Dr. Thomas W. Smith. We regret exceedingly that we had not seen an earlier copy than the March number (No. 3), which accidentally fell into our hands—especially as we find it to contain papers of merit read before the Society

of which it is the organ, and because we find it edited with an ability that would be a credit to a much more pretentious undertaking. The N. E. Va. Society seems to make the appointment at each of its monthly meetings of the Editor for the ensuing month. The March number was under the editorship of Dr. H. M. Clarkson, a gentleman accustomed to letters and an experienced medical practitioner whose guidance it is safe to follow. We take pleasure in placing The Journal upon our exchange list, and commend it to the favor of our contemporaries, with the assurance, personally knowing most of the gentlemen composing the Society as we do, that such an exchange will prove to be more serviceable than many now on the exchange list of all the leading journals. And to the subscribers, too, we cordially commend it—especially if a Virginia doctor—as we know he will get from its pages value received. Price \$1 a year.

Fluvanna County, [Va.] Medical Society and Its Tariff Laws.

We learn from *Practice* that the Physicians of Fluvanna county, Va., have recently organized themselves into a Medical Society for mutual benefit. Why it is the profession of all the counties of this and other Southern States have not long since formed themselves into like associations we do not understand, especially when it is seen that almost every advance made in medicine is made or else comes to light through such organizations, and also that mutual interest of a financial character is promoted by them. Dr. R. C. Bowles, of Kent's Store, Va., who writes the letter to *Practice*, says in reference to his county organization, that "the good results of the movement are already apparent;" and he earnestly recommends the organization of like societies in other sections. The following are the resolutions lately adopted by the Fluvanna County Medical Society:

Whereas, by reason of the exemption laws in this State and the peculiar nature of our vocation, we are practically a class ignored by the law, having no legal recourse for the

collection of our claims; therefore, be it

Resolved, 1, In view of the fact that we have to pay cash for supplies needed by our families, it is understood that our medical bills are due when services have been rendered.

Resolved, 2, All accounts remaining unpaid on the first day of January and the first day of July of each year are to be closed by a bond with waiver of the homestead.

Resolved, 3, That we will always hold ourselves in readiness to respond to deserving charity calls; but when we are

summoned to such persons who are able to pay something, and who never pay anything, we shall not feel called upon to respond, particularly when attendance has been refused

by a brother practitioner for the reason aforesaid.

Resolved, 4, In order that we may be better enabled to carry into effect the foregoing resolution, we pledge ourselves to report promptly to each other the names of all such persons; and to govern our action accordingly until former bills have been satisfactorily settled.

Resolved, 5, For the purpose of mutual improvement that does of necessity flow from association and interchange of experience, we agree to organize into a permanent County

Medical Society.

Microscopical Society of North Carolina.

A call has been issued to the leading medical and other scientific men of North Carolina interested in Microscopy to meet in Fayetteville, N. C., during the session of North Carolina Medical Society, to convene May 8th, 1888, for the purpose of organizing a State Microscopical Society. The "ceaseless energy," as one of the local papers well puts it, of the prime mover, Dr. Paul B. Barringer, of Davidson College, N. C., in perfecting this organization almost certainly guarantees a success. Dr. Thomas F. Wood, of Wilmington, has also entered into the effort. With the restoration of his health and return to the active duties of the profession, such help doubles the assurance of successful organization. Such an organization will supply a want and do a great deal of good.

Annual Volume XV. of this Journal

Is begun with this issue. A great many subscription bills are sent out with it, which we hope will receive prompt responses. To most subscribers \$3 is a small thing; but to the journal Proprietor non-attention to these bills becomes a source of worry and anxiety. But worse than that is the subscriber who, at the end of the year, wants to know by what authority the sending of the journal was continued—why it was not discontinued when the money paid up ran out.

Buffalo Lithia Springs, Va.

We have long recognized the virtues of the waters of these Springs. But some recent contributions to the pages of this journal by experienced and able practitioners, who have been life residents in their vicinity, have awakened anew the interest we have taken in studying their therapeutic qualities and some of the wonderful reports of their curative That the water is profoundly alterative there cannot be a shadow of a doubt. The cases that can be adduced in support of this conviction are too numerous and too remarkable to be accounted for on the doctrine of coincidence. That it is a tonic to the digestive apparatus and involuntary nervous system is attested by the recuperation of dyspeptics and the restoration of tone to the nervous system of organic life in those who have abundantly drunk the waters without having the added help of rest from business or the pleasures of a summer jaunt and recreation at the Springs' hotel itself. That it is anti-rheumatic and curative as well of "attacks of the chronic gout," as the recurrences of gout pains and aches are commonly called, there can be no question. The leaders of medical thought and practice all over the country bear willing witness to these things Evidence is becoming voluminous as to a seeming special curative virtue it has in chronic interstitial nephritis; and in numerous other kidney troubles, congestive and even inflammatory in their nature, the prolonged use of this water, as the sole beverage or drink, has given remarkably beneficial results, clearing up all traces of the characteristic albuminuria, removing the attendant dropsies, dispelling all signs of uramic effects, and returning the patient to the activities of life. We wish we could give the prominence to this virtue to which its merits entitle it. It removes the albuminuria of scarlet fever, and when given as the only drink during the progress of that disease, it prevents the nephritic sequel or complication. It is alike useful in albuminuria of pregnancy. And since Dr. Hunter McGuire pointed out the nerve tonic properties of Spring No. 2—regarding the waters of which, he remarked that he had witnessed such a calming effect in men and women, whose broken down nervous systems had kept them in perpetual motion, who could not sleep and could not rest, that he was often induced to imagine that he had administered a tonic dose of a bromide. might go on mentioning one after another of the demonstrated medicinal virtues of a natural water that is abundant in this State, but our space is too limited for further remarks.

Dr. Hunter McGuire, of Richmond, Va.,

Has recently had the degree of LL. D., conferred on him

by the Jefferson Medical College, of Philadelphia, Pa.—a very rare compliment. It will be remembered that he received the like title about a year ago from the University of North Carolina. "To him that hath shall be given." But he deserves all he has received. Is there anything more in the way of available titles, etc., for him to get?

The Memoir of Dr. O. F. Manson,

In the March No., 1888, of the North Carolina Medical Journal, prepared by the Editor of that excellent Journal, is so full and so well written that we would suggest to the friends of this great Southern author and physician, to secure a copy of that journal—30 cents a copy at the home office in Wilmington, N. C.

Graduates Medical College of Virginia, 1888.

Drs. E. T. Baker, George Corrie, J. F. Lynch, of Richmond, James Albert, R. L. Gilmer, of Russell Co., W. E. Anderson, B. C. Jones, of Dinwiddie Co., J. S. DeJarnette, of Caroline Co., J. W. Hope, of Hampton, J. Kinney, of Alleghany Co., J. S. Marshall, of Isle of Wight Co., C. C. Smelser, of Botetourt Co., J. B. Thomas, of Southampton Co., J. H. Pierpont, of Florida, J. L. Stump, of West Va. Dr. C. J. O'Hagan, of Greenville, N. C., delivered the address to the graduates, March 30th.

Dr. Henry T. Bahnson, of Salem, N. C.,

During the past winter received the Honorary Diploma of the Louisville Medical College. Such a distinction is well merited, and honors the College that bestowed it. He has filled the highest posts of professional trust in his own State—having served his full term of six years as a member of the Board of Medical Examiners of the State of North Carolina, and is now a member of the North Carolina State Board of Health. His modest satisfaction with a full practice in his village home, and a retiring disposition from the public are his faults. But he possesses the character and disposition that make man lovable, and the ability as physician and surgeon which would make him eminent were he to settle in a large medical centre, and allow his friends to bring him out as a leader or teacher. He is yet a young man and progressive in his studies and achievements.

Dr. James Parrish, of Portsmouth, Va.,

Having been duly nominated by the Executive Commit-

tee of the Medical College of Virginia during March, has been appointed a member of the Medical Examining Board of Virginia to fill the vacancy for the unexpired term (ending December 31st, 1888), caused in the Second Congressional District, by the resignation of Dr. L. Lankford, who has moved out of that District. We understand that Dr. Parrish has been assigned to the Secton on Anatomy.

The distinction shown him by the representatives of the State Society and by the Governor in confirming the nomination is a compliment of which any practitioner should be proud, and one which we have no doubt will be shown to be appreciated by continuous attention to the discharge of

the duties which have been assigned him.

Obituary Becord.

Dr. J. M. Steele,

The oldest physician of Fincastle, Va., died rather suddenly at the home of his daughter in Fincastle (Mrs. T. H. Allen), March 26th. He was not a Fellow of the Medical Society of Virginia.

Dr. Cornelius Rea Agnew,

The eminent specialist in ear and eye diseases of New York city, died at his home April 18th, 1888. While attending Mr. Roscoe Conkling in consultation with reference to some ear disease, Dr. Agnew was taken with peritonitis, from which disease he died. No cause can yet be assigned for the peritonitis. Dr. Agnew was born in New York city, August 8th, 1830. He graduated in medicine from the College of Physicians and Surgeons, of New York city in 1852, in which College he became Professor of Eye and Ear Diseases in 1869, which position he retained till his death. During the war, his eminent services in the cause of humanity as a member of the United States Sanitary Commission will long be remembered. In 1872 he was President of the Medical Society of the State of New York. Indeed, so many honors were thrust upon him in recognition of his merits that it would fill a full page simply to record them. As a man, he was good; as a citizen, useful; as a Professor, fluent, attentive and popular; as a physician, deservedly among the eminent of his country. In the death of Dr. Agnew, the profession has lost a great man.

VIRGINIA MEDICAL MONTHLY.

VOLUME XV—No. 2.

WHOLE NUMBER, 170.

RICHMOND, MAY, 1888.

Priginal Communications.

ART. I.—Case of Atropia Poisoning Successfully Treated with Amyl Nitrite, with Remarks on Treatment. By LEWIS G. PEDIGO, A. M., M. D., Greystone, Henry county, Va.

At Martinsville, Va., on Monday, March 19th, 1888, at 2:30 in the afternoon, I was called into consultation in a case of atropia poisoning. Physicians present: Drs. Jas. M. Smith, (physician in charge,) John R. Anderson, C. P. Smith, Henry M. Drewry and Madison Drewry. The patient, a man, aged about 40 years, had called at his physician's office for a hypodermic injection of cocaine. By some one's mistake, one grain of sulphate of atropia had been dissolved, instead of the same quantity of muriate of cocaine. One half of this solution (a half grain of sulphate of atropia) was injected beneath the skin at one dose.

The patient proceeded on his way home (a distance of about three hundred yards), and complained of a peculiar feeling of discomfort on the way; but on reaching home he so far recovered in a few minutes that he entered his study and began the examination of a set of law papers. He soon found that his powers were rapidly failing. His call of alarm was answered by a servant, who found him in an utterly helpless condition and carried him to his bed. The patient passed into a state of profound stupor and uncon-

6

sciousness, with all the usual symptoms of belladonna poisoning. Several physicians were called in, the diagnosis was promptly made, and the treatment was begun about 12 M.

The remedies used were alcohol, strychnia and morphia (all hypodermatically), and galvanization of the sympathetic. The aggregate amount of morphia given in the case was 1½ grs.; of strychnia, 1-25th gr. The exact amount of alcohol was not recorded.

At 2:39 o'clock, when the writer's observation of the case began, the patient was sinking rapidly. The respiration was kept up by artificial means; the pulse was steadily becoming feebler, and the appearance of the temporal vessels and face indicated decided cerebral anæmia. At this time a hasty consultation was held, and the use of nitrite of amyl was suggested and agreed to. The drug was secured promptly, and was administered by inhalation. Artificial breathing had become the only means of sustaining the function of respiration; so that the first dose of the amyl was literally pumped into the lungs. The beneficial effect was unmistakable. A finger on the pulse discovered immediate improvement in the action of the heart; the lungs began to draw in air by the natural method—still needing a little artificial encouragement, however, but much less, and much less constantly than before. The use of the drug was regulated solely by its effects on the three great vital organs the heart, lungs and brain. No definite dose was given, but as much as a half drachm was poured on a handkerchief and held to the nostrils at different times during the progress of the case. The temporal vessels were closely watched for the indication to withhold the remedy.

It is a noteworthy fact that several minutes elapsed after the striking effects on the action of the heart and lungs before the cerebral circulation manifested any change. The drug was used in varying doses and with intermissions of

varying lengths for more than an hour.

About 4 o'clock the patient began to improve in all respects. The capillary circulation was perceptibly better, and the muscular system began to respond at times to the strong galvanic current which had been used for nearly four hours. Soon the nitrite of amyl and the battery were no longer needed, and it was obvious that the crisis was past. The patient began to struggle, making repeated efforts to sit up. When the heart's action was thought to be safe, the sitting posture was allowed.

Then followed the usual stage of exalted reflex excitabil-

ity. The patient became a complete automaton. Every sound, every current of air, every external phenomenon that could possibly reach him became in its turn a controlling influence, and found a response in some bodily action. The man was busy, muttering indistinctly and incoherently upon various subjects and handling unreal objects. Habit and external impression were the two factors that absolutely controlled him. One particular act may furnish a curious illustration. When a train was heard to signal its approach to town, he assumed the air and attitude of listening, drew a phantom watch from an imaginary pocket, looked at it with a pair of blinded eyes, seemed entirely satisfied, and passed quickly to another subject.

Bromide of potassium was administered in two doses of 30 grains each, with the happiest effect in controlling these reflex symptoms. The patient became comparatively quiet after the first dose, and was entirely relieved of "nervousness" by the second. At 7 P. M. he was surprisingly comfortable. The after effects were fewer and less pronounced than in any case of narcotic poisoning I have ever witnessed. The usual cystic troubles were very slight and soon passed away. The patient slept well that night, and was on the

street in about two days.

The first point that strikes us in this case is the very large dose of atropia from which the patient recovered. In my investigations on this subject, up to the time of this writing, I have found no recorded case in which so large a quantity of atropia, given by the hypodermic method, has been recovered from under any kind of treatment. One case occurred in England last year which is fully as remarkable, all things being duly considered. It is found in the British Medical Journal, July 2, 1887. A child two years of age swallowed a solution containing one grain of atropia; seen two hours afterwards. Treatment was by 1-6th grain acetate of morphia, given hypodermatically, and sal volatile and brandy, by the same method, every 15 minutes. Morphia (1-6 grain) was repeated in four hours. When we consider the relative ages of the two parties on the one hand, and on the other the fact that atropia acts so overwhelmingly when used by the hypodermic method that the dose under the skin should be less than one-half the dose by the mouth, we estimate that the British case presents the more remarkable recovery.

Still, one other point must be noticed just here. The susceptibilities of different patients to atropia are more variable than to any other drug known, not excepting opium. This statement does not refer to degrees of tolerance established by habitual use of the drug, but to degrees of natural susceptibility. Every practitioner remembers numerous patients who have shown the full medicinal effects of belladonna after one dose of ten drops of the tincture. Now to any one of the half dozen physicians who saw the case recorded in this paper, it is obvious that the patient would have died under the simple treatment outlined in the London case. It follows that, while the two doses were about the same, the susceptibility of the older patient to the poison was even greater than that of the two-year-old child. He had substantially the same treatment up to a certain point, and was dving despite it all.

This brings us to the consideration of the nitrite of amylas used in this case, and as a remedy to be used in other similar cases. This drug, as I am informed by two of the most eminent authorities in America, has never before been used in belladonna poisoning. Heretofore, opium, preferably in the form of hypodermic morphia, has held the highest place in the treatment of such cases. It is not here proposed to discard that invaluable remedy for another, nor to suggest nitrite of amylas a specific antidote; but it is proposed to add the latter to the list, place it beside the former, and define the proper uses and functions of both in belladonna poisoning.

First let us understand, once for all, that there is no specific antidote to belladonna—no one drug that antagonizes its poisonous action at all points. The better to understand this proposition in all its bearings, it is necessary to enter into a short digression. I trust I may be able to repay the reader, in some measure, for his patient endurance of tediousness by developing a principle which might be observed

in all forms of poisoning.

This principle, briefly stated, is that synergy as well as antagonism must be carefully considered in the application of our remedies. This principle should imperatively control us in two particulars, viz.: in the strength of the dose and in the stage at which it is administered. We may find numerous illustrations in the case before us. Take the morphia, which is generally used with something like recklessness, under the general notion of antagonism. It is evident to any person who understands the action of the two drugs that they antagonize at some points and synergize at others. We recognize this every day therapeutically in combining the two remedies. Why not be equally wise in toxicology? It was observed in the case above reported that the pulse was better sustained than the respiration. Why? Because morphia is one of the best cardiac sustainers known to the profession, and because its depressant effect upon the respiration coincided with the secondary depressant effect of belladonna on this same function. Thus we see that we should be very cautious in the use of morphia in the first stage.

Furthermore, it is plain that if so large a dose of belladonna has been taken, that we cannot sustain the *heart* against it by the use of morphia without depressing the respiration to the death-line, that case is beyond the reach of morphia alone.

So we have, in these two functions, sharp and stubborn limits to the use of our morphia. Now, if we can find a remedy that will sustain the heart's action at this time, when the full allowance of morphia that we can safely give has done all it can do and is destined to fail, it seems to me we are almost extricated from the dilemma.

When we find one more effect, viz.: that this same drug will sustain the respiration against the combined action of belladonna and morphia, thus warranting us in giving larger doses of the latter in the primary stage—removing somewhat the stubborn limits and allowing freer play to that wonderful drug in its effects upon the heart—it is evident that we have a remedy of incalculable value. I beg to submit that we have such a remedy in the nitrite of amyl.

Now, once more, notice the principle of synergy. It should not be given in the primary stage; it is contra-indicated by the over-stimulated condition of the respiratory function and by the hyperæmia of the brain. But in the second stage, when the heart is beating feebly, the breathing is only kept up by artificial means; when the face is pale, the brain anemic; when, in short, the tripod of life is tottering and threatening to fall, then it is that the nitrite of amyl should be called to our aid. If morphia has been used, the respiration is the first of the three great functions to fail. I suggest that the first symptom of failure of this function should be the indication to begin the use of the remedy; and as the cerebral circulation is the last to respond to its effects, let this be the guide for its temporary withdrawal. It should be continued through the second stage and gradually withdrawn as the case approaches the third stage, or period of reflex delirium. I apply this name to this condition as expressing, to my mind, most fully and concisely, the phenomena observed.

This period is of more importance than is generally supposed. Patients have frequently died in this stage. It seems that the vital powers, already enfeebled, tend towards complete exhaustion under the severe reflex tension—the continued nervous activity. A close observation of the symptoms will suggest the remedy—bromide of potassium. In the one case in which I have tried it the effects were very satisfactory.

The use of the bromides in this connection as a matter of detail is probably new; the principle that underlies its use is very old. The indication is merely to depress the reflex excitability of the spinal cord.

Now, finally, a word as to the use of *strychnia*. It is undoubtedly a remedy of value in anticipation of the stage of depression; but it must be used with double caution, not only because of its poisonous qualities, but because its *spinant* action aggravates (if unwisely given) the reflex symptoms in the stage of delirium. I could not help thinking, when observing the case under review, that if the strychnia had been pushed ever so little beyond the proper bounds, its effect, augmenting the usual nervous symptoms of the third stage of belladonna poisoning, would have thrown the patient into convulsions—another illustration of the importance of the principle of *synergy*.

If I had another similar case to treat I would use morphia in the first stage, strychnia and nitrite of amyl in the second, alcohol in the first and second, and bromide of potassium in the third.

I take the liberty of announcing that I am engaged in a series of physiological experiments bearing upon the antagonism between nitrite of amyl and the cardiac depressants, such as prussic acid, aconite and veratrum viride. I may further state here that I have accumulated some reasons to believe that the most deadly poison known to the profession (prussic acid) will find its long-sought antidote in nitrite of amyl. When the experiments shall have been completed I shall lay them before the readers of the Virginia Medical Monthly in a sequel to this paper.

ART. II.—Some Points in the Management of Typhoid Fever.* By I. N. LOVE, M. D., St. Louis, Mo.

I shall not fatigue this body with a labored paper upon typhoid fever, giving in detail its history, etiology, clinical characteristics, etc., for all of you, being as you are busy workers in the profession, are in no need of an exhaustive and exhausting elaboration of the subject. I feel safe in taking it for granted that you are all familiar with the literature

Through the researches of Koch, Eberth, Myer, Friedlander, Gaffky, and later, of Fraenkel and Simmonds, the typhoid bacillus has become an entity which must not (and cannot safely) be lost sight of during the progress of a case and after its termination.

The points I propose to present are the result of observations made in hospital and private practice during the past sixteen years, some of them being more particularly emphasized during the career of a series of cases occurring within the past six months.

I think we are too much inclined to be on the lookout for

^{*}Read to the Missouri State Medical Association, 31st Annual Meeting, at Kansas City, Mo., April 17, 1883.

classical representatives of this disease, as in many others. I have had a number which I placidly considered simple continued fever: temperature not ranging higher than from 101° to 103°, no rose spots, no tympanites, no special evidence of intestinal irritation, nothing leading me to suspect typhoid fever until suddenly aroused to an appreciation of the fact by dangerous and repeated hemorrhages from the bowel, and in one instance, in (1877) the bleeding continued until it proved fatal. This latter occurred in a boy of six. and came like a clap of thunder in a clear sky, and was convincing proof to me of the falaciousness of the idea that formerly obtained, that young children were not susceptible to the malady. In this connection I recall the circumstance of a consultation visit made to a young man, who had been ailing for some weeks, though he was up and about until a few minutes before the family physician was summoned and found him suffering great agony. An investigation developed an intestinal perforation, which caused death in a short time. The clinical history and the post mortem revelations evidenced an illustration of "walking typhoid fever."

We know that we frequently have scarlet fever so mild in its expression as to be entirely overlooked, until the attention is aroused by grave nephritic trouble; and so in all diseases, the artistically perfect specimen is the exception

and not the rule.

It has no doubt been the observation of all, that the course and complications of this disease are as varied as the individual victims, but it was not recognized till lately (by Griesenger) that numerous light and rudimentary attacks, (typhus levissimus) belonged to typhoid fever at all; they used to have all sorts of names applied to them, as Struempel suggests, the favorite being "gastric fever."

The diagnosis is of course difficult in proportion to the scanty development of typhoid symptoms, and it is best established by demonstrating an etiological relation between them and others which are plainly typhoid fever. *Apropos* to this mild class of cases, there comes to my mind a case under my observation last December, a five-year-old boy,

in a family where three other cases developed (one fatal) of a violent character; the child was sick only about twentyone days, and under ordinary circumstances, his case would have been diagnosticated simple continued, or remittent fever.

As the individual manifestations may vary, so do entire epidemics; one season the type is violent, and another mild. During the past six or eight months I have had under my care an unusual number of typhoid fevers, and these, together with nearly all that I have observed for two or three years past, have been much more favorable in their results, due possibly more to the mildness of the infection than the character of the treatment, though I am persuaded that the latter had something to do with the favorable showing.

Since about July 21st, 1887, I have kept a record of thirty-six cases, and of that number two died; of these, one really died of acute mania superinduced during the period of convalescence, by sudden shock and grave domestic sorrow, she being a nursing mother, of intensely neurotic temperament; the other was a delicate, overworked girl of sixteen, with tubercular diathesis, and sick for ten days before a physician was called, she having been six days and nights without sleep, and in fact died from meningitis as a complication.

There are those who believe that, by active interference, typhoid fever may be aborted. Though I am not ready to endorse this proposition, I am sure that it may be modified and abbreviated. I cite briefly the following as an illustration:

July 21, 1887, J. T. D., taken with violent vomiting, and intense abdominal pain; examination revealed a lusty, plethoric youth of eighteen, red tongue, heavily coated, pulse full and 140 per minute, temperature 105.5° F., acute tenderness over abdomen, with constipation. Remedies were ordered for opening bowels, soothing stomach, and reducing temperature. After the lapse of twelve hours an action of the bowels had been secured, but no improvement of the general conditions. At once I ordered one grain of mild chloride of mercury every hour, and the application of ten leeches over stomach and the ileo-cæcal region, at the

point of greatest tenderness, followed by hot fomentations. The leeches abstracted five or six ounces of blood, occasioning great relief; at the end of ten hours, the ten grains of mild chloride had produced active purgation, and this, together with the local abstraction of blood, had mitigated all the symptoms; the temperature was down to 102, the pain and tenderness almost gone; no nausea, no vomiting. The patient was in every way more comfortable, and jogged along for four weeks with a mild form of typhoid fever, instead of dying during the first five or ten days, as I believe he would have done, had a temporizing course been pursued.

Recognizing the disease as an infectious one, dependent upon a specific virus, it behooves us to treat it upon the antiseptic plan, aiding elimination by stimulating the excretory organs, sustaining the strength by diffuse stimulation at the proper time, and furnishing an abundance of nutrition in a form for prompt assimilation.

Since the introduction of antipyrine, the dangers of high temperature are much less than formerly, as we can certainly control that feature; however, I favor the very careful administration of the drug until full opportunity is given for the ascertainment of susceptibility to it. There has been recorded already a number of unfavorable results, even death itself, owing to some peculiar idiosyncracy. I prefer small doses (five to ten grains to adults) at short intervals, keeping up the effect continuously, rather than large doses and sudden and excessive falls of temperature. I think sudden reduction, no matter how obtained, is not so likely to be maintained; sudden reductions are depressing, and endanger heart failure and prompt return of elevation.

While antipyrine is of great value as a febrifuge and tranquilizer of the nervous system, at the same time, diaphoretic, I feel that in the cooling bath, we have an agent equally or even more valuable. By cooling bath, I do not mean the sudden immersion in cold water; that is uncalled for, undesirable and brutal. The temperature of the water in the outstart should be about the same as that of the patient, and may be gradually reduced down to 85 or 80. The bath may be prolonged five or ten minutes. I doubt

not you have all seen, as I have, patients wildly delirious, go calmly to sleep during the progress of the bathing. The advantages of the bath, I take it, are:

1st. The reduction of temperature is accomplished gradually and comfortably to the patient in accordance with

nature's plan of putting out fire by water.

2nd. The water acts primarily as a soother of the peripheral nerves, and secondarily calms the disturbed nerve centres.

3d. It stimulates the secretory glands, allays thirst by being directly absorbed into the heated and dry tissues, hungering and eager for drink; encourages diaphoresis as well as diuresis.

4th. Influences favorably the respiratory organs by energizing inspiration, and thus aids in the securement of expectoration, and as a result, bronchial complications are less frequent.

5th. The hygienic effect upon the skin is of great value, removing as it does the foul smelling products of the sweat and sebaceous glands, aiding in the procuration of strength and elasticity to the cutaneous and adjacent tissues, a condition antagonistic to bed sores.

Of course it goes without saying that the bath should be administered with due regard to the comfort of the patient; drafts should be avoided, and immediately following a thorough drying and brisk rubbing should be instituted, and warm covering with hot water bag to the feet if need be, and a nice cup of hot broth, or a little wine or toddy would be in order.

I think antipyrine and bathing or spongeing may be used conjointly, to good advantage. As an antipyretic, quinine should be ruled out altogether. In doses sufficiently large to reduce temperature, it is demoralizing to the nervous system as well as to the digestive tract; and when we recall the fact that the sheet anchor of hope in typhoid fever is good digestion and nutrition and tranquil nerves, we can see that the objection to quinine is well founded. If well defined malaria presents itself, as a complication, an antipyretic is of course indicated, and quinine should be given, but very carefully.

In this connection permit me to express the opinion that the so-called "typho-malarial fever, of Woodward," is a misnomer, being probably nothing more than a modified expression of typhoid fever plus malaria. Certainly the coining of new names for every modification of a disease is confusing, and the practice should receive no encouragement.

The above need not be interpreted as an objection to the use of tonic doses of quinine during the period of convalescence, but as against the administration of quinine to an unadulterated case of typhoid fever.

In the earlier, middle or later stages of the disease, there may come a time when the necessity of the situation demands the removal of the patient from one section of the country to another; I desire to place myself on record as being strong in the opinion that the danger of removing a person, seriously sick, has been much overrated; that with due care and a guarding against chilling of the surfaces, and the interruption of the proper amount of sleep, typhoid fever and other dangerous cases may be safely transported hundreds of miles. I have a record of four cases successfully and advantageously removed from one hundred to one thousand miles on sleeping cars, which justify this conclusion.

As the administration of the calomel purge in the beginning is satisfactory, so the renewal of one-eighth grain doses every other day to the number of a half dozen, is an advantage in the direction of keeping the bowels open, as well as serving as an intestinal antiseptic. If an additional aid be required to evacuate the bowels, an enema of a teaspoonful of glycerin will be efficient. En passant, I desire to emphasize the value of one dram injections of warm glycerin (as suggested by Anocker) into the bowel as a ready means of securing a prompt evacuation of the same.

Permit me to emphasize the most salient points I desire to make, by summarizing as follows:

1st. Typhoid fever varies in intensity, severity, and length of attack, the same as do other infectious diseases, and while it has not yet been established that any of this

class can be aborted, yet typhoid with all the rest, may be mitigated and abbreviated, and unfortunate complications

and sequelæ prevented.

2d. To the securement of this end, I think that which is of paramount importance is management rather than medication, though there are many dangers which can only be tided over by the prompt and proper exhibition of drugs.

3d. The administration of remedies which are antiseptic, and which stimulate the excretory organs is important; and for this purpose, small doses (one-fiftieth grain) of bi-chloride of mercury, or the mild chloride (one-eighth to one-quarter grain) as often as is necessary to produce an effect is of value.

4th. Nutrition, by the administration of food in a form for prompt assimilation, is a necessity; and to this end, the diet should be limited to peptonized milk, beef peptones, bovinine, (Bush's), etc., bearing in mind that the stereotyped home-made beef-tea is of no more value as a food than a weak toddy—being a mild stimulant, and nothing more.

5th. Freedom from pain, tranquility, and perfect rest, should be insisted upon; and bearing in mind that this disease of all others has a wrecking effect upon the nervous system (it having been called by some German writers, fieber nervous, or nerve fever), we should see to it that our patient obtains not less than twelve to sixteen hours sleep out of the twenty-four, and the remainder of the time be saved from meddling, misdirected kindness of over-zealous friends.

6th. For the obtainment of sleep, and the relief of nervousness, the administration of antipyrine, chloral, paraldehyde, urethane, and the bromides are preferable to opiates,

though occasionally the latter are demanded.

7th, When the conditions surrounding a patient are unfavorable, and a change is desirable, even to a distant point, the removal, under proper precautions against chilling and unrest, may be permitted, or even preferred—the danger of the same not being as great as it is generally considered to be.

8th. As a rule, a patient with typhoid fever, or any wasting disease, should not be permitted to have bed sores; they

are an expression of starved tissue, and neglected skin, and are preventable, the means for their prevention being proper nutrition and bathing.

ART. III.—The Mental Condition Caused by Alcohol. By PHILIP S. ROY, M. D., One of the City Ward Physicians, etc., Washington, D. C.

I do not intend to give the literature on the subject named in the title given to this article, but only to give the directions which may have to be studied in order to arrive at correct conclusions in any medico-legal case.

A medical man may be called upon at any time to testify in some criminal case growing out of alcoholic excesses. Law has become modified (by the Judges of the law who have sought after truth) to such an extent that no longer is the statement made without qualifications, "Drunkenness is no excuse for crime." In fact, most medical books now describe a special form of insanity which they call "alcoholic dementia," and with its description they give separate enumerations of symptoms to indicate the mental unsoundness due to alcohol. I cannot see any reason for this, for I do not believe it possible to determine, from the symptoms, in any given number of cases of insanity, those due entirely to alcohol.

We know alcohol disturbs the action of the cerebrum, both directly and by reflex action. It is one of the most powerful and common causes of mental and physical unsoundness. The brain, from alcoholic abuse, may become the seat of extensive pathological lesions to account for the mental condition, or all of the bodily functions may become so diseased as to entirely deprive the person of healthy thought.

As to the question of mental responsibility of one under the influence of an alcohol, we must carefully deal with each case as it arises, to make certain that it is not one in which the individual has used alcohol to madden and deaden feeling in order to commit crime.

In dealing with the subject, I will first state that the de-

sire for alcohol as a drink may be inherited, just as consumption and epilepsy can be. We know that in nearly all inherited diseases the person *inherits the tendency* to the disease rather than the disease. Children are not generally born with consumption or epilepsy, but with the proper tissues for their development.

With this view, which is no doubt true, it cannot always be said that alcoholic intemperance is a volitional sin. The idea that it is always volitional is false, and without foundation. We know all our defects are the results of sin, but we know many are without cure in this world, or even control. The Christian life, as beautiful as it is, cannot remove all the inherited tendencies from the third and fourth generations; the Christian has to live with the surroundings of sin and its defects stamped upon his mind and body, and one of the most terrible is the inherited or acquired and uncontrollable impulse to drink.

The question that comes up for the lawyer and physician to determine is how to tell when men are or are not responsible for their acts while drunk, when the state of drunkenness has carried the individuals beyond their control—from whatever cause it may have been produced. Alcohol can only be viewed as a drug which plays its part in Materia Medica, having its own physiological action, which, in many cases, is modified by the individual differences of people. Any good work on Materia Medica will give the physiological effects of this drug, but I must say none of the books are very practical in their teachings on this subject.

I believe, however, almost any observer will acknowledge that most men when drunk know right from wrong—for it is one thing to intelligently reason out why he should not commit murder, or a crime of any kind; and another, and much easier mental operation, to know that it can be punished by law. The drunkard who cannot remember the law must have drunk to complete physical helplessness; consequently it would be a physical impossibility for him to commit any crime.

Alcoholic intoxication, in order to be an excuse for crime, must in some way make the mind either permanently or

temporarily insane. The insane can never be punished. As a distinguished Judge of South Carolina has said: "Insanity makes the person irresponsible—be that mental unsoundness due to the finger of God upon the brain, or the direct result of some wrong act of the individual."

The direction, I think, that will have to be taken to find the proper solution of the individual responsibility as to uncontrollable acts while drunk, is in the realm of the impulses. For, as Judge Edmond (in an article by Dr. Mann, as quoted by the *Journal of Inebriety*, in July, 1884) says, "The man, to be a criminal, must have not only memory and intelligence to know that the acts committed were wrong, but also reason and will to control his acts."

This legal view places us upon delicate and difficult ground, but it enables us to view the subject from the right stand-point—that is, from the stand-point of the physiological action of alcohol.

Alcohol usually renders the person less capable of resisting impulses to crime. He possesses less will power and less reasoning power. This would certainly render the criminal less responsible for his acts, when it had been committed by one who had irresistible impulses to drink.

The next important result of alcohol is to make the victim more indifferent as to the results of his action, both from a social and legal stand-point. This is a form of cerebral anæsthesia. The most powerful impulse to do right in this world, other than religious, is the one that comes from a desire not to offend society. The love of the good opinion of man saves many from wrong-doing. Alcohol, in a great measure, destroys or deadens this feeling, and with the loss of this desire for the good opinion of the world, comes also great indifference to the punishment connected with wrong acts.

Another result of the constant use of alcoholics is one not in favor of the criminal, for it somewhat weakens the first statement in his favor. It is this: that we well know that we can get accustomed, in a great measure, to the action of almost any drug, to the extent that we can almost, by will power, make ourselves act naturally when at first any one would have noticed unnatural actions. Those who have often used alcohol can, in time, become so accustomed to it that they act naturally, and have nearly all their mental powers.

What is true of this drug is true of all impressions that can alter mental action. It is this that accustoms the individual to become used to severe pain, which at first rendered him almost irresponsible. The mind can be rendered less capable of control by other impressions than drugs. Dyspepsia will often change the whole nature of a man.

I believe the mind can be much disturbed in its action without its losing its control, or being unable to tell right from wrong; but often when this power is left, the impulses cannot be controlled.

I think the only just way of dealing with this special plea for defence by an alcoholic habitué, in case of crime, is to have a jury of medical men who have given special attention to mental troubles. They would pay no attention to such instructions as were given by a Judge who is cited in the *Medical Record* of February, 1884. The Judge says, without qualifications: "Inebriety is voluntary, and always entered upon with more or less consciousness of the danger and possibility of wrong-doing; hence could be no excuse for crime."

Alcohol also renders the system less capable of ridding itself of urea and carbonic acid, thus causing secondary poisoning of the man. The power of taking up oxygen is also lessened.

These are the questions that would come up in a case of one under the influence of alcohol until mind and body become a complete wreck, when all could see that no longer could the individual be dealt with as a sane being. It is not the well-defined case that causes trouble; it is the uncertain ones.

I cannot close this article without giving the views of Judge Cothram, of South Carolina, where a special plea of insanity had been made in a criminal case. I think he has given the law so clearly that nothing more can be added. He said:

1. Where insanity is interposed by defendant, as a defense under a plea of not guilty in a criminal prosecution, the defense must be proved by a preponderance of evidence.

2. The mere interposition of such a defense without evidence to support it does not require the State to prove its

non-existence beyond all reasonable doubt.

3. When the criminal act was the immediate result of voluntary intoxication and committed while it lasted, the

intoxication furnished no excuse as defense.

4. When the State fully proves a *prima facie* case, and a special defense such as insanity, etc., is interposed, it must be established only by such preponderence of evidence as to satisfy the jury; the charge is not sustained beyond all reasonable doubt. If not so established, the defendant should be convicted.

A similar opinion has been given by Judge Coolie.

Of course I have not attempted in this article to give the tissue changes due to alcohol. They are chiefly the increase of connective tissue. Any good work on pathology is far more complete than any one article could be. Nor do I question that in some cases this drug completely dethrones the will and all the powers of the mind, but these idiosyncracies to the actions of the drug are the exceptions rather than the rule.

ART. IV.—Bloodless Resection of Tongue for Epithelioma; Operation Performed without General Anæsthesia and without Pain, under Cocaine.* By JOSEPH A. WHITE, M. D., Senior Surgeon to the Richmond Eye, Ear and Throat Infirmary, etc., Richmond, Va.

A man about 35 years of age presented himself at the Richmond Eye, Ear, Throat and Nose Infirmary with epithelioma of the tongue. The cancerous tissue was situated about the centre of the left half of the organ. The ulcerated space was a little larger than a silver quarter-dollar. The surrounding induration extended to the centre of the tongue and considerably in front of and behind the ulceration. As the only chance of cure was in a thorough removal of the diseased tissues, I determined to remove as much of the tongue as might be necessary.

^{*}Read before Richmond Medical and Surgical Society, April 12, 1888.

All the operations with which I was acquainted, all that I had ever seen performed, and the only one I had ever done myself (a V-shaped resection of the tongue for macroglossia), caused considerable and sometimes dangerous hemorrhage. The great vascularity of the tongue and the large vessels feeding it not only give great probability of hemorrhage, but the contracted space to work in makes the hemorrhage dangerous because of the difficulty of arresting it.

The use of the galvano-cautery and the ecraseur for removal of the tongue have materially lessened the risks of hæmorrhage; and as I almost daily use one or the other in nasal surgery (my ecraseur being Jarvis' snare), I determined to attempt the removal of the tongue by their combined aplication under the influence of cocaine.

A large needle was threaded and passed vertically through the anterior part of the tongue a little to the right of the median line. Both ends of the wire were then run through the canula of a Jarvis' snare and made fast, thus tightly compressing the anterior part of the tongue. This snare acted as a lever to move the tongue during the other stages of the operation and later as an ecraseur to cut off the part it encircled.

A mouth gag was then inserted, cocaine (10 per cent solution) freely applied to the tongue, and the latter split in two from before backwards by the galvano- and thermocauteries, a little to the right of the median line.

A needle armed with a wire was then passed under the left half of the tongue at the posterior extremity of the

wound and brought out at the molar teeth.

The ends of this wire were in turn run through another Jarvis' snare and made fast, thus compressing the posterior part of the portion of the tongue to be removed. By gradually turning the screws of the two snares the parts were slowly divided. When the anterior snare had nearly severed the tissues it encircled, and it became difficult to turn the screw any longer, the canula was removed, a platinum wire hooked on to the steel wire and drawn around the pedicle in its place. This was passed through the canula of a galvano-cautery snare, and the pedicle divided by the hot wire. A wire was then threaded in an aneurism needle and passed beneath the snare around the posterior portion of the tongue in the sinus made by it in the sub-lingual tissues. This wire was run through the canula of the snare, which

had just cut through the anterior portion, completely encircling the attachments of the tongue to the floor of the mouth, and these tissues were separated by the gradual turning of the screw as far as it would go. When it would turn no longer, the platinum wire was drawn around the pedicle and the section finished by the electro-current. Lastly, the posterior part of the tongue was severed in the same manner.

The operation lasted five and a half hours. The patient sat in a comfortable chair with a head-rest. The mouth-gag

was occasionally removed to rest him.

During this period he was given five or six big drinks of whiskey. The parts were kept deadened by the solution of cocaine, and during the operation about 25 grains were used. He positively asserted that there was no local pain, his main discomfort being a dull aching in the top of the head. No blood was lost—not as much as a drachm—although both ranine arteries and the sub-lingual were severed. No bad effects followed the operation. There were no constitutional manifestations from the seemingly excessive use of cocaine. The patient remained quietly in bed the next day, but was up and about the second day. The healing was very rapid, the eschar from the burns came away readily, and the parts granulated healthily under a bi-chloride of mercury wash (1 to 4000) and iodoform applications.

In ten days he was discharged from the Infirmary.

A careful examination of the parts showed no induration

and no sign of unhealthy tissue.

This patient was exhibited before the Richmond Medical and Surgical Society both before and after the operation.

Of course, the disease may return, notwithstanding the care to eradicate it, and the case is reported merely to show that, with a little trouble, operations on the tongue can be done without any possible danger, and without resorting to difficult and dangerous operations, such as ligation of the

lingual arteries, laryngotomy, etc.

Among the recorded cases during the year 1887, Heurtaux (Gazette Med. de Nantes, Jan.) ligated the linguals. F. Mc-Gill (Edinburg Med. Jour., Aug.) reports four cases, with preliminary laryngotomy and plugging the pharynx. Velpel (Gaz. des Hopiteaux, July), one case ablated with ecraseur after ligature of both linguals. Lockhart Stevens (Lancet, Oct. 22), a similar case to mine, removal of left half of tongue

but after preliminary laryngotomy. Butlin (Lancet, March), also a case of removal of left half with knife and ligation of arteries as they were cut, but there was great bleeding, and secondary hemorrhage five days after. Farnon (Jour. des Sci. Med. de Lille, Feb.), a case removed by thermo-cautery and ecraseur. Barwell (Lancet, Dec. 31) describes an operation very similar to mine, and with only slight bleeding; but there are essential points of difference, as I did not use the knife at all. I think my method a much easier one. I will add I had not read of Barwell's method prior to the operation, and only found it recently in looking up the literature of the subject.

The use of the galvano-cautery, wire ecraseur, etc., for removal of the tongue is nothing new, and Mr. Christopher Heath, in a recent number of the *British Medical Journal*, in a lecture on this subject, says that they have been generally discarded in favor of the *scissors*, especially the galvano-cautery ecraseur, because of the danger of secondary hæmorrhage.

Whilst this in a measure is true, I think the above modification of the combined use of the galvano-cautery, the cold wire snare, and finishing the work with the hot snare, in dividing the small pedicles left by the compression of the cold wire, is an improvement on the methods hitherto in use. Moreover, the very slow division of the tissues by the cold wire, until a small, dense pedicle is left, which is then severed by the electric current, makes the resulting eschar so small that there is little or no danger of secondary hæmorrhage; and where the surgeon has the time I am satisfied he will find the above method a good one. And the point of interest is the absence of pain under cocaine in such a tedious operation.

The purser of the steamer Britannic relates an incident of a young lady crossing the ocean in one of their elegant ships. A portion of her diary reads as follows: "At eight o'clock in the evening I took a pill; at six in the morning I passed an iceberg."

Gorrespondence.

The Hospitals of London and the Practice of Some Surgeons.

Mr. Editor,—My last letter brought me to London, where I have been since March 3d.

There is some difficulty in this large city to find suitable post-graduate instructors. One feels very much the want of a polyclinic such as may now be found in many of our cities. There is an abundance of material of course, but one feels the want of proper clinical teaching. Some of the physicians and surgeons teach their classes at the bedside, but there is no place where doctors can have special courses, as in other places, notably in Vienna. There is post-graduate instruction here, to be sure; but it is for the students, and not very advantageous to doctors who have been for several years in practice. Private instruction can be had, however, by making application.

There is much to be learned by visiting the hospitals at the hour for operations, etc. If a card is presented it often insures a kind reception, and an opportunity to stand near and witness the operation, instead of occupying perhaps a distant seat. A card or letter of introduction to the surgeon is far better, and insures the visitor a good position; and, if he should again visit the hospital, it secures for him a recognition and opportunity to actually witness each step of

the procedure.

At the Samaritan Hospital, the so-called "home of ovariotomy," one can see from two to four abdominal sections per week. Sir Spencer Wells did the greater part of his surgery here. Dr. Bantock now does the greater part of the work. Mr. J. Knowsley Thornton comes next in the number of cases, and occasionally Meredith or Doran do an ovariotomy. Doran is Bantock's assistant, and is the author of a work on abdominal surgery, etc. Occasionally one can see a hysterectomy, or a cholecystectomy, or a perineal operation. Battey's or Tait's operations are rarely seen here.

Besides the Samaritan, there are numerous other hospitals devoted to gynæcology, such as the Hospital for Women,

Soho square, and the Chelsea Hospital. All kinds of minor surgical work of this kind can be seen at any of these hospitals. They are all free to practitioners upon presentation of cards. In the month just closed I have been able to witness twenty abdominal sections for various kinds of disease. It does not seem appropriate, then, to speak of the various methods pursued by various surgeons. Each one apparently delights in some new process in which he is known to be unlike the other operators. There can be no doubt that Bantock and Tait lead the gynæcological profession in England, and their well-known antipathy to Listerism needs no mention in this brief letter.

Besides the branch of surgery just mentioned, there is an abundance of other surgery to be seen. St. Thomas, just across the Thames from the Houses of Parliament, is a splendid hospital, where one may see numerous operations on almost any public day. The surgical staff at this hospital appears to be composed chiefly of young men, who are not so well known in our country as many others, but the work they do is equally as good, and they are certainly very kind in giving the visitor an opportunity to see the operations. On Sundays, at 1 P. M., Bristowe gives a most valuable clinic in the wards. There are but few students present on Sundays, and it is a rare occasion for the visitor.

Mr. Bryant still visits Guy's Hospital, although he says he is soon to retire, having nearly reached sixty years of age. He operates with wonderful skill, and he is as courteous and attentive to strangers as he is dextrous in operations.

Mr. Joseph Lister, of antiseptic fame, is to be seen at Kings College Hospital on Fridays, at 1 P. M. The spray is with him a thing of the past, but he uses the irrigation method, and numerous colors of gauze and bandages. I did not see Mr. Lister do any but comparatively minor operations, and confess to a feeling of disappointment at his surgical ability.

At the Middlesex Hospital the chief surgeons are Lawson Hulke and Morris. The latter is well known as the pioneer nephro-lithotomist. He is a bold surgeon and a good teacher. He is the author of a small work on diseases of the kidneys,

which is considered here a good one. Mr. Hulke, though not so well known in America, is quite a specialist in many departments. He can extract a cataract or perform an ovariotomy. He is now President of the Ophthalmological Society here, and is also a geologist of distinction, and is a very popular clinical teacher.

Messrs. Heath, Hill and Horsley, at the University College Hospital, are all surgeons of great ability, and have crowds of students and practitioners following them in the wards of

the hospital.

It is quite out of place to mention the prominent men who are doing the work now, and who bid fair to fill creditably the place of such men as Bryant, Lister and others, who are about to step aside for them.

One will soon find here that popularity in America and in England mean different things. To be plain, I will say that some men here who write much, and speak as having authority, and, better still, knowledge, have but little claim to either.

I would like to tell you of many of the new methods of surgical practice, but want of space forbids, and they will all come out in the journals.

I learn that the Keiths, father and son, are soon to locate permanently in London. There is some excitement in surgical circles in reference to it.

Sir Andrew Clark has just been elected President of the Royal College of Surgeons, and was elected by a few votes

over the scholarly Dr. Quain.

The English still reject Emmet's operation for lacerated cervix, although Dr. R. T. Smith, of the Hospital for Women, will shortly report one hundred cases, which should at least attract attention to the operation.

Mr. Lawson Tait's new flap perineum operation is used instead of Emmet's.

Dr. Sayre's plaster-of-Paris jackets are not used here in any of the hospitals.

I should also mention that Dr. Alexander's operation (shortening the round ligaments) does not meet with much favor among the gynæcologists.

The new or "Apostoli method" of treating uterine fibroids is meeting great opposition in the Gynæcological Society. I believe that none of the abdominal surgeons favor it. There are, however, a number of men determined to continue a trial of it. A great diversity of opinion prevails here, as at home, about the current, its strength, and possibility of exact measurement.

The operation for radical cure of hernia is frequently done here. I saw the famous John Wood operate at King's College Hospital for this condition. Like all of the others, he laid the sack open, dissected it out, and with the omentum (if protruding), after ligating, cut it off. Then, with large, curved needle, he sewed up the distended ring, and used, as

they all do, a drainage tube, and Lister dressing.

Many surgeons use kangaroo tendon, to leave in a wound where they fear catgut may not give the necessary support. From what I have seen of its use, I should not try it. The great difficulty is to be sure it won't slip. It is very hard to tie. As silk always answers quite well in ligating the pedicle in ovariotomy, etc., surely it ought to be preferred over this new and dangerous tendon ligature in other wounds.

Although Lister does not use the carbolic spray, it is frequently used by others. At all times it clouds the view of the operation, and in many ways is disagreeable. Operators who do not use the spray get better results in abdominal surgery, and equally as good in other operations; so it looks like an unnecessary precaution in general surgery. In fact, those operators who use the spray use numerous wet towels over any exposed wound-surface, as though they would keep the cloud of spray from touching it.

In writing a letter from here my greatest difficulty is not to find news, but to avoid telling too much. Hoping that this may not weary you, I am

Yours truly,

I. S. Stone, M. D. (of Lincoln, Va.)

London, Eng., April 15, 1888.

Original Translations.

From the German. By M. D. HOGE, Jr., M. D., Richmond, Va.

Treatment of Nephritis Scarlatinosa.

Dr. Hase (in Jahrb. f. Kinderh, N. F. XXVI, H. 3,) out of 145 cases of scarlatina treated in the Elizabeth Hospital, thirteen per cent. were complicated with nephritis. disease was most frequent in the second and third year, giving fifteen and a half per cent, but the complication with nephritis occurred most frequently in the fourth and fifth years, giving twenty-three per cent. The gravity of the disease had no effect upon the nephritis. In eighteen cases of nephritis, the scarlatina was mild in ten. The course of the nephritis in six of the cases was very alarming, being complicated with uramic convulsions and eclampsia, and once with amaurosis. In regard to treatment, Dr. Hase has employed the following with the best results: At the outset of the disease with diminished secretion of urine, concentrated and tinged with blood, a milk diet and light meat soups, daily two or three cups of strong coffee, a warm bath to produce copious perspiration. In the way of medicine he prescribes:

S.—Dessertspoonful 6-8 times daily.

If much fever, antipyrin or antifebrin; if uramic convulsion threaten, one to three grains of calomel hourly. If there is much bloody urine, then an infusion of secale cornutum. As soon as the blood disappears from the urine and much albumin remains, then solutions of tannin and alum.

Pseudomeningitis from Oxyuria.

Dr. Dévaux (in Centralbl. f. Nerven R.—Rundschav, Mar., 1st, 1888.) A well developed child three years old was suddenly taken sick with fever, lassitude and nausea, irregular rapid pulse, also tonic left-sided convulsions and trismus; later he became somnolent, and had grinding of the teeth; respiration very irregular and resembling Cheyne-Stokes character. No paralysis or strabismus. On the second day after the attack, a dose of calomel produced a copious evacuation of the bowels, and in the dejecta a large number of

oxyuria were found and forthwith a sudden and complete cessation of all the previous symptoms. On the fourth day, the bad symptoms returned in a milder degree, but were at once relieved after a dose of calomel as before, since which time the child has remained entirely well.

New Treatment of Diphtheria.

Dr. Carl Siebert (Rundschau, Mar., 1st, 1888,) starting from the standpoint that diphtheria is produced by a special bacillus, and for its growth certain conditions are necessary, one of which is a certain degree of temperature, concluded that if this element could be eliminated and the temperature greatly reduced, the disease would run a short course. A child aged two years, was attacked with diphtheria in which all the usual remedies were resorted to for seven days without any effect. The symptoms increased in severity so that tracheotomy was advised, but refused by the parents. An ice bag was then applied to the neck, whereupon the child became at once quieter. This was persisted in for eight days without intermission, after which the little patient rapidly recovered.

Rupture of Uterus-Recovery.

Dr. T. Bastaka (Rundschau, March 1st, 1888.) A most peculiar case of a woman in her tenth labor has recently been reported. Soon after considerable excitement her pains began and increased to much severity. A physician was called who declared that she would soon be delivered and that the position of the child was normal. He directed the nurse to give secale cornutum every half hour, and left her in charge. As the child did not progress, towards evening a physician was summoned who diagnosed rupture of the uterus. Forceps were applied, and the child delivered as far as the shoulders where great resistence was met with; however, it was accomplished with some difficulty. the placenta was looked for, it at first could not be found in the uterus, but was in the abdominal cavity without any adhesions. After this was removed, a foreign body was discovered hanging out from the vulva, it proved to be a piece of the omentum. Four days afterwards with a temperature of 99° and pulse 102, reposition of the prolapsed omentum was tried but without success. Under strict antisepsis, the piece was ligated close to the opening in the orificium uteri, and cut off below, so that a short stump remained. No reaction set in during the puerperium, and all went well from day to day; the stump grew smaller and finally disappeared. Twelve days afterwards the patient left her bed, and in two months time she menstruated regularly as before.

Proceedings of Societies, Boards, etc.

MEDICAL EXAMINING BOARD OF VIRGINIA.

The First Session of the Medical Examining Board of Virginia, under the amended law, approved March 3, 1888, (which was reported in full in our March number, 1888, pages 970–3), was convened, by call of the President, Dr. H. G. Latham, in the Hall of the House of Delegates, Capitol Building, Richmond, Va., at 8.30 P. M., Tuesday, April 17, 1888. The session was called at this time so as to accommodate what was believed to be the general wish of the graduates of the medical colleges during the winter and spring, who proposed settling in Virginia. The Board was in session through April 18th and 19th.

The following is a postoffice list of the

Members of the Board in Attendance During this Session.

Drs. H. Gray Latham, of Lynchburg, President; J. Herbert Claiborne, of Petersburg, Vice-President; Hugh T. Nelson, of Charlottesville, Secretary and Treasurer; Thomas J. Moore, of Richmond; Herbert M. Nash, of Norfolk; Jesse H. Peek, of Hampton; R. A. Lewis of Richmond; C. R. Cullen, of Henrico county (P. O. Richmond); Hugh M. Taylor, of Richmond; G. A. Taber (H.), of Richmond; Wm. J. Harris, of Blackstone; Hugh Stockdell, of Petersburg; Rawley W. Martin, of Chatham; Wm. L. Robinson, of Danville; A. Trent Clarke, of South Boston; Charles C. Conway, of Rapidan; and Henry W. Patterson, of Staunton—17 members.

[Chief Feature of Amended Law.

The principal feature of the recently amended law relating to the Medical Examining Board of Virginia is, that hereafter all candidates for examination for license to practice medicine, surgery, etc., in the State of Virginia, shall appear before the Board in regular session, instead of allowing any candidates to appear before three individual members of the Board, at their respective homes, as formerly. Provision, however, is made for cases of emergency, which claim of emergency must be decided by the President of the Board. Should the claim of emergency be sustained by the President, then he shall appoint three members of the Board to assemble at a given time and place, when and where they shall organize themselves into a committee, and in session

examine the candidate or candidates for license, and pass upon the examination paper or papers as if the Board were

in full regular session.

As there are many interested parties inside and outside of Virginia, who are yet uninformed, or else misunderstand the effect of the Virginia law regulating the practice of medicine in the State, at the risk of repeating matters we have published in former issues of the Medical Monthly, we will give a resumé of the requirements, etc., as set forth in

the present amended statute.

The Medical Examining Board of Virginia went into effect January 1, 1885. Any one having had a license to practice medicine or surgery anywhere in the State of Virginia prior to that date is exempt from the operation of this law. But any other person, who, since that date, has undertaken to practice medicine, surgery, etc., for compensation, without first having received a duly signed certificate of having passed a satisfactory examination before the Medical Examining Board of Virginia, and having his name "registered in the clerk's office of the county or corporation court for the county or corporation in which he shall reside," is practicing illegally; and on conviction before any of the courts of the Commonwealth, shall be fined "not less than \$50 nor more than \$500 for each offence, and shall be debarred from receiving any compensation for services rendered as such physician or surgeon."]

Reports of Sections were called for in order, and were

read by their respective chairmen.*

Dr. Lewis stated that several persons who expected to appear before the Board, had come to him requesting that the time allowed each Section be lengthened beyond the allotted three hours. Discussion followed at considerable length, and was taken part in by Drs. Nash, Claiborne, Robinson, Taylor, Moore, Taber, and Conway.

Dr. Taber then offered the following:

Resolved, That the rating of an applicant in any Section be left to the discretion of such Section, whether the ratings be made upon all the questions, or upon the number of questions actually answered by the applicant; also that the members of a Section be allowed to shorten or otherwise modify their questions.

Dr. Lewis moved to lay the resolution on the table, which

^{*}The questions as proposed by the several Sections were subsequently modified, and are given further on in their adopted form; hence they are omitted here.

motion, having been seconded by Dr. Taylor, and put to the

Board, was carried.

Dr. Conway moved that the questions read by the Chairmen of the several Sections be ordered read a second time, so that they might be more carefully considered in their relations to the time requisite for answering them properly. Dr. Moore seconded the motion, and it was carried.

Below are the questions as adopted by the Board.

[PLAN OF EXAMINATION.

Under the by-laws approved at the last meeting of the Board, "the applicant is required to answer at least three-fourths of the questions satisfactorily, and he is to be rejected if he fails to answer satisfactorily thirty-three and one-third per cent. of the questions on any one Section or sub-division of the whole examination. He is also required to sign his papers with a number furnished him by the Secretary, who shall reord the number after the applicant's name on his registered list to be kept for the purpose, and only the President and Secretary shall be allowed to examine the aggregate sheet during the examination."

In all examinations before the Board, if not distinctly so stated, it is always implied and understood that each party undergoing examination pledges his word of honor, without mental reservation, or evasion in any manner whatsover, that during such examination he will neither give to a fellow candidate, nor receive from him or from any other improper source, any information relating to the subject immediately under consideration, unless it be with the knowl-

edge and consent of the Examining Committee.

The time allotted to make answers to questions in each Section is three hours.

I.—Section on Chemistry.

Members:—Drs. R. A. Lewis, of Richmond (Chairman), Jesse H. Peek, of Hampton, Hugh T. Nelson, of Charlottes-ville, and Smelt W. Dickenson, of Marion.

Ques. 1. Give the specific gravity of normal urine. State what specific gravity would indicate the probable presence of sugar; and give the two most reliable tests for sugar and albumen.

Ques. 2. Name several substances which result from the oxidation of alcohol, and describe their properties.

Ques. 3. Name the three most important alkaloids or or-

ganic bases used in medicine, and give their sources and

properties.

Ques. 4. Give the chemical composition of hydrochloric acid, its mode of preparation, its properties—physical and chemical—and its tests.

Ques. 5. Give the sources of bromine, its mode of preparation, its properties—physical and chemical—its uses, and

the mode of testing for it when in combination.

Ques. 6. Explain how and why water is decomposed when the poles of a galvanic battery are placed in it. Give the whole process and the theory of decomposition.

II.—SECTION ON ANATOMY.

Members:—Drs. Hugh M. Taylor, of Richmond (Chairman), Wm. P. McGuire, of Winchester, James Parrish, of Portsmouth, and R. D. Huffard, of Chatham Hill.

[By request, we mention after each question asked in this Section the name of the member of the Committee who proposed it, and also the valuation attached to a perfect answer of each of the questions.]

Ques. 1. Describe the orbit. (Taylor—Value 15).

Ques. 2. Describe the diaphragm. (Taylor—Value 15).

Ques. 3. Name the muscles which, by their tendons, re-

inforce the shoulder joint. (Parrish—Value 10).

Ques. 4. Describe the brachial artery, its relations, variations, branches and their distributions. (McGuire—Value 10).

Ques. 5. Give the number and general description of the

pulmonary veins. (Parrish—Value 10).

Ques. 6. Describe the great sciatic nerve—its position, relations, its continuation and branches without their distributions. (McGuire—Value 10).

Ques. 7. Locate and describe the heart, and give its minute

anatomy and size. (Huffard—Value 15).

Ques. 8 Locate and describe the ventricles of the brain. (Huffard—Value 20).

III.—Section on (I) Hygiene and (II) Medical Juris-PRUDENCE.

Members:—Drs. J. Herbert Claiborne, of Petersburg (Chairman), Charles R. Cullen, of Richmond, S. W. Carmichael, of Fredericksburg, Oscar Wiley, of Salem, and G. L. Stone, of Richmond.

Ques. 1. What do you understand by "hygiene"? Mention some agents in the application of the principles thereof.

Ques. 2. Define a "disinfectant." Give the names of some of the most efficient disinfectants, their relative value and modes of action.

Ques. 3. Give some account of the sanitary management of the sick-room. How would you proceed to disinfect a room from which a sick person had been removed?

Ques. 4. Name some of the most common sources of the pollution of drinking water, and the best methods of puri-

fying the same.

Ques. 5. How would you distinguish a case of suicide from homicide by the character, appearance, location, etc., of the wounds and the surroundings of the body?

Ques. 6. What is rape in the eyes of the law, and what

are the accepted evidences of the same?

IV.—Section on Physiology.

Members:—Drs. Wm. L. Robinson, of Danville (Chairman), Herbert M. Nash, of Norfolk, A. Trent Clarke, of South Boston, and I. S. Stone, of Lincoln.

[The valuation fixed upon a perfect answer to each of the questions of this Section is $12\frac{1}{2}$.]

Ques. 1. State the derivation of albuminous compounds, and their distinctive characteristics. (Clarke).

Ques. 2. State the object of absorption, and name the agen-

cies concerned in the process. (Clarke).

Ques. 3. Give the physiological explanation of the sounds of the heart, and the capacity of the left ventricle when fully distended. (Robinson).

Ques. 4. State the phenomena which occur during mus-

cular contraction. (Robinson).

Ques. 5. Give briefly the physiology of hearing, with the contributions of each anatomical part to the function. (Robinson).

Ques. 6. Describe the mechanism of the secretion of bile,

and the glycogenic function of the liver. (Clarke).

Ques. 7. State the effect of section of the vagi upon the

heart, respiration, and deglutition. (Nash).

Ques. 8. State the frequency of the heart's action at one year, three years, eight years, twelve years of age, and of the adult. (Robinson).

V .- Section on Materia Medica and Therapeutics.

Members:—Drs. Charles C. Conway, of Rapidan (Acting Chairman), Hugh Stockdell, of Petersburg, Robert J. Preston, of Marion, J. F. Neff, of Harrisonburg, and M. A. Douglass, of Danville.

Ques. 1. Give the methods by which medicines are intro-

duced into the organism.

Ques. 2. Name the principal preparations of mercury, and give a full description of their uses in medicine.

Ques. 3. Name four of the most efficient arterial se latives,

and their doses.

Ques. 4. Name four of the most efficient nervous sedatives, and their doses.

Ques. 5. Give doses and therapeutics of apomorphia, tar-

tar emetic, atropia sulphate, and arsenious acid.

Ques. 6. Give the rapeutical uses and the incompatibility of tannin.

Ques. 7. Classify emetics and give examples, and state the doses and modes of administration of each.

Ques. 8. Give source, uses and dose of carbolic acid.

Ques. 9. Name some of the best laxatives and hydragogue cathartics

Ques. 10. Give antidotes for poisoning by arsenious acid, salts of strychnia, mineral acids, and opium.

Ques. 11. Give contra-indications for the use of iron, quinia,

and nux vomica.

Ques. 12. Describe opium and its alkaloids.

VI.—Section on Obstetrics and Gyn. Ecology.

Members:—Drs. Geo. A. Taber, of Richmond (Acting Chairman), Alex. Harris, of Jeffersonton, Z. J. Walker, of Brownsburg, W. W. Douglas, of Warsaw, and O. B. Finney, of Onancock.

Ques. 1. Describe the female pelvis, giving differences due

to the presence of the soft parts.

Ques. 2. Give signs and symptoms of labor; also unfavorable symptoms.

Ques. 3. Give causes, symptoms, prognosis and treatment of prolapse of the funis.

Ques. 4. Give diagnosis of breech presentation.

Ques. 5. Give causes and complications that may arise in retained placenta, and how proceed to deliver.

Ques. 6. Give causes, prognosis and treatment of post-

partum hæmorrhage.

Ques. 7. Give management of child after delivery.

Ques. 8. Invagination of uterus; give causes, symptoms, prognosis and treatment.

Ques. 9. Subinvolution of uterus; give causes, symptoms

prognosis and treatment.

Ques. 10. Give indications necessitating podalic version, and manner of performing it.

Ques. 11. Perimetritis, parametritis, and endometritis;

give differential diagnoses.

Ques. 12. Under what circumstances would you use anæsthetics in labor?

VII.—Section on Practice of Medicine.

Members:—Drs. Rawley W. Martin, of Chatham (Chairman), Henry M. Patterson, of Staunton, W. J. Harris, of Blackstone, Bedford Brown, of Alexandria, and W. P. Jones, of Petersburg.

Ques. 1. Causes of Emphysema, cholera infantum, valvular diseases of heart, renal calculus.

Ques. 2. Pathology of Typhoid fever, acute dysentery, apoplexy, pleuritis.

Ques. 3. Symptoms of Pneumonia, cancer of stomach, sclerosis of liver, cholera morbus.

Ques. 4. Diagnosis of General treatment of fever, diabetes mellitus, cystitis, cholera infantum.

VIII.—Section on Surgery.

Members:—Drs. Thomas J. Moore, of Richmond (Chairman), T. B. Greer, of Rocky Mount, G. D. Meriwether, of Pedlar Mills, H. Grey Latham, of Lynchburg, and F. Webster, of Norfolk.

Ques. 1. Causes of { 1. Secondary hæmorrhrge. 2. Fistula in ano. 3. Strangulation of intestine. 4. Glaucoma. Ques. 2. Pathology of { 1. Carbuncle. 2. Potts' disease. 3. Synovitis. 4. Rachitis.

Ques. 3. Symptoms of 1 Shock. 2. Otitis media. 3. Septicæmia. 4. Coxalgia.

Ques. 4. Diagnosis of \begin{cases} 1. Chancre. 2. Hernia. 3. Aneurism. 4. Intra-capsular fracture of femur.

Ques. 5. Treatment of 1. Erysipelas. 2. How to tie axillary artery. 3. Oblique fracture of femur. 4. How to perform Pirogoff's amputation of foot.

Under call for Reports of Officers, Dr. Hugh M. Taylor, Chairman of *Executive Committee*, read his Report, as follows:

REPORT OF THE EXECUTIVE COMMITTEE.

Mr. President:—As Chairman of the Executive Committee,

I beg leave to submit the following report:

During the session of this Board (October 19th–22d, 1887). a resolution was adopted, petitioning the Legislature, then soon to assemble, "to repeal that provision of the law allowing applicants to appear before three individual Examiners." In order to awaken an interest in the proposed change, especially in view of rumors, which subsequently proved well grounded, to the effect that the students, and others connected with the Medical College of Virginia. would actively oppose this repeal, your Chairman of the Executive Committee, with the approval of yourself, Dr. Nelson, and the other members of your Executive Committee, consulted with a number of the profession of the city of Richmond, believed to be in sympathy with the proposition, and as a result the following circular was issued, and a copy sent, with a blank petition as called for in the circular, to Fellows of the Medical Society of Virginia, and to other influential members of the profession whose addresses could be readily obtained:

"Please Give this Immediate Attention.

"RICHMOND, VA., November 24th, 1887. "Dear Doctor:—The Virginia State Board of Medical Examiners was organized to protect the people of Virginia from incompetent physicians and surgeons, and was intended in no way as a slurr or reproach upon either of the two medical schools of the State. Indeed, the law which compels all applicants for practice in Virginia since January 1st, 1885, to pass a satisfactory examination before this Board before being granted a license to begin practice in this Commonwealth, has met with the official approval of both the Medical College of Virginia and the University of Virginia, as shown by letters dated December 3d, 1885, and November 22d, 1885, respectively. In fact, Dr. James L. Cabell, of the University, writes: 'I have to say, with emphasis, that I do heartily approve it, without any qualification. It is now nearly forty years since I proposed, in a report to the American Medical Association, this very system of an entire divorce between the teaching and

licensing authorities as the only practical method of securing a real improvement in medical education in the United States. Every year's experience has served to strengthen my conviction of the necessity for such a reform,'

No one can truthfully deny that the Virginia Board has already contributed to the elevation and improvement of the profession of medicine, and to the safety and well-being of the public. But the law, as it is, is imperfect. One of its features permits a candidate to appear before three individual examiners, instead of requiring him to stand the examination before the Board during one or the other of its semi-annual sessions. The result of some of these individual examinations' is that incompetent persons pass the Board, and receive their licenses to practice, and the object of the law becomes thereby measurably defeated. But when the Board is in session, the names of the candidates whose papers are being examined are not known, nor are the colleges from which they have graduated, and the candidate stands or falls solely upon his individual merit. When, however, the candidate appears before three individual examiners, he selects those from whom he thinks he may expect leniency or favors. Thus, the prime object of the law is defeated. The Medical Examining Board itself recognizes this defect in the law, and came before the Medical Society of Virginia, at its recent session, to ask its aid in securing a repeal of the clause which permits individual examinations.

The propriety of the proposed change in the law was likewise recognized by the Medical Society of Virginia, an organization representing between 650 and 700 of the most prominent members of the profession in the State. During its recent session in Richmond (October 20th–22d, inclusive) the following preamble and resolution was almost unanimously adopted:

'WHEREAS, it has been demonstrated that that provision of the law "Regulating the Practice of Medicine and Surgery" in Virginia, allowing applicants for examination for license to practice in this State to appear during the vacation of the Medical Examining Board before three individual examiners, is a defect in the law;

'AND WHEREAS, the high mission of the Medical Examining Board of Virginia is seriously hindered thereby; therefore—

'Be it Resolved, that the Legislative Committee of this Board, together with a Committee to be appointed by this Society, be requested to petition the Legislature to repeal that provision of the law allowing applicants to appear before three individual examiners.'

In compliance with this request of a number of the Fellows of the Medical Society of Virginia, the undersigned members of the profession issue this letter to urge upon you the importance of immediately securing the influence of your legislator to repeal the objectionable clause in the Act as it now stands upon the statute. Besides asking you to write a personal letter to such members of the Legislature as you may have influence with, we respectfully ask you to secure as many signatures of members of the profession to the accompanying petition to the Legislature from your county or legislative district as you may be able to obtain, and return it, thus signed, to Dr. Landon B. Edwards, Richmond, Va., on or before Saturday, December 3d, 1887, so as to let them be systematized and duly presented by the Committee of the Board to the respective legislators during the succeeding week."

[Signed]: Hunter McGuire, Landon B. Edwards, W. W. Parker, Jos. A. White, George Ross, Chas. W. P. Brock, Hugh M. Taylor, M. D. Hoge, Jr., Edward McGuire, Jacob Michaux, R. A. Lewis, R. B. Stover, Wm. B. Gray, Lewis Wheat, Ben. Harrison, Willie S. Gordon, C. L. Cudlipp, G. W. Harris, John Knox, Thos. J. Moore, T. J. Riddell, M. A. Rust, John G. Skelton, Thos. E. Stratton, Phil. Taylor, J. G.

Trevillian, and others."

We wish to state that some objection was found with this petition, in that it only asked for the repeal of that clause of the law which provided for individual examinations. According to our interpretation, the Board had requested only one change, and your Committee was acting only for the Board. The other proposed changes in the law, which called for a reduction of the number of members of the Board, and for a diploma of each applicant as prerequisite to appear before the Board originated in the State Society, and had certainly never received the official endorsement of the Board. We did not, therefore, feel that your Executive Committee had the right to advocate changes which had not been sanctioned by the Board.

Another fault found with the petition was that it contained names of only Richmond physicians. We wish to state that we did not have the time to send it elsewhere for signatures, owing to the fact that the General Assembly was about to convene, and we were anxious to get the bill on the calendar of the House of Delegates at an early day. Nor did we think it necessary, as the object of the petition was clearly stated, and should have received attention, with or

without names.

Several members of the Society declined to sign the petition, because they interpreted the action of the State Society in asking for the indicated changes in the law as a reflection upon the individual Examiners—an intimation that the Examiners had not been faithful to the trust imposed by

the Medical Society of Virginia. One or two members of the Board also took this erroneous view of the case. This misconception arose from the fact that the gentlemen had not attended the recent meetings of the Board or Society, and did not understand that the Society had taken no action until requested to do so by the Board.

Several hundred signatures to the petition were returned. These we had systematized and printed, and copies sent to the General Assembly, and its circulation, we think, contributed in no small degree towards securing the amend-

ment proposed by your Board.

To correct the many mis-statements contained in the paper presented to the Legislature by a Committee of the Students of the Medical College of Virginia, asking that they be exempted from the requirements of the "Medical Law,"*

"To the General Assembly of Virginia.

We, the students of the Medical College of Virginia, and citizens of the Commonwealth of Virginia, co most respectfully petition the Legislature to exempt the graduates of medical institutions chartered by the State of Virginia from standing an examination before the State Board of Medical Examiners, for the following reasons—viz:

I. The medical students of Virginia are attending institutions chartered and partially supported by the State of Virginia, and are paying more for their tuition

at these home institutions than they would pay elsewhere.

II. The antagonism manifested by certain members of the State Board of Medical Examiners to at least one of our medical colleges is open and marked, and

therefore the Board is not as conservative as it should be.

III. The laws regulating the mactice of medicine and surgery in the State of New York, New Jersey. New Hampshire. Nevada, Nebraska, Missouri, Minnesota, Michigan, Maryland, Louisiana, Kentucky, Iowa, Indiana, Georgia, Florida, Delaware. Connecticut, Colorada, California, Alabama. Ohio, Pennsylvania, South Carolina, Vermont, West Virginia, Wisconsin and Kansas are rigid and severe, but these States protect their medical colleges by recognizing the diplomas of these colleges as a sufficent guaranty of the graduate's fitness to practice medicine.

IV. The State Board of Medical Examiners having never passed an examination before any Board, and having been selected at random from among practitioners to whom the art of examining is something new, have not the experience that our Faculties have obtained by years of constant teaching and associ-

ation with the student.

V. The sole object of the law regulating the practice of medicine and surgery is a selfish one—i. e., to prevent competition. Medicine is studied and practiced for the sake of profit and gain, and not for "sweet charity's sake," as the authors of sentimental "gush" that has appeared in the columns of our newspapers from time to time, would have you believe. Competition is the life of this, as well as of other trades.

VI. The students of our medical colleges are mostly young men who are educating themselves, and can ill afford to bear the expenses of travelling, hotel bills, and examination fees incident to appearing before the State Board of Med-

ical Examiners.

^{*}The following is a copy of the petition of the students of the Medical College of Virginia referred to:

VII. The money spent by our students in railroad fares, hotel bills, examina-

the following reply was prepared by the President and Secretary of this Board, and distributed among the members of the Legislature and wherever it was thought it would do good. The petition of the students above referred to was an indictment of the mission, methods, and in some particulars of the *personnel* of the Board, and if allowed to remain unrefuted was calculated to injure the standing of this Board:

"THE STATE BOARD OF MEDICAL EXAMINERS.

"For years, State and National Medical Associations have been striving for a reform in medical education. The graduates of Medical Colleges in many instances have been poorly prepared to practice their profession, and very often have evinced the greatest ignorance. The repeated appeals of the profession to the Medical Colleges for better teaching and a higher standard for their graduates, have been answered in many instances; but many schools and colleges still send out men who are ignorant of the first principles of their calling. To correct this and other evils to be mentioned, a large number of the States have organized Medical Examining Boards, made up of men not connected with colleges. For fifteen years North Carolina has had a Medical Examining Board in success-

tion fees, etc., in order to appear before this Board, would be spent at their own home and amongst their own people if they were exempted from appearing before the State Board of Medical Examiners.

VIII. The facilities for teaching medicine, clinically and didactically, have increased ten-fold during the past few years, and the graduate of the present day is better qualified to practice his profession than were the members of the State

Board of Medical Examiners when they graduated,

IX- The graduates of our col eges have invariably stood the severest tests before the Army and Navy Examining Boards. Students who have distinguished themselves before the Faculty and before their fellow students by their proficiency and their attainments have been rejected by the State Board of Medical Examiners.

X. The failure to pass a successful examination before the State Board of Medical Examiners casts upon the young graduate a stigma from which he never

recovers, while to pass it successfully is no benefit to him.

XI. Of the three resolutions adopted by the Medical Society of Virginia at its last meeting, asking for a modification of the law regulating the practice of medicine and surgery, only one has been embodied in the circular addressed to you—i. e., the resolution asking for the abolition of the District Boards. At the meeting of the Board in April, 1887, a little over one third of the members were present. This growing indifference on the part of the Board of Medical Examiners will eventually throw the destiny of the applicant into the hands of a few prejudiced examiners.

XII. The present law regulating the practice of medicine and surgery was gotten up by a few for the benefit of a few, and is class legislation of the most pronounced form; Therefore we petition that it be amended so as to exempt the graduates of our home institutions.

JAMES N. ELLIS, W. B. ASHBURNE, WILL. N. KLASE, A. B. SMITH, J. W.

HENSON, JUNIUS F. LYNCH.

Committee for Students of the Medical College of Virginia."

ful operation, and the profession and public generally recognize the great improvement in the education and ability of its medical practitioners. Alabama is also one of the States in the South which has taken the lead in this matter. ginia law is framed after the law in Alabama. New York, New Jersey, Ohio, Illinois, Indiana, and a majority of the rest of the States have appointed Medical Examining Boards, which are in successful operation, and the whole profession agree in the great good that has been accomplished. The graduates in medicine are better prepared, better educated, and better fitted for the responsible work before them. Already one advantage of the Medical Examining Board is seen in Virginia: the schools in the neighboring States, to which many of the students from Virginia go for their education, have raised their standard, and refused to graduate men unless they believe they can pass the Virginia Board. Communities are thus benefitted and protected; for the better prepared to practice his profession a man is, the better for the people among whom he lives.

"While some of the schools of medicine have raised their standard in obedience to the demand of the profession, a very large number have refused to do so. There are so many schools and the competition is so great that every expedient is used to To such an extent has this been carried, secure a large class. that, in cities where there are two or more colleges, a representative from each meets the student at the railroad station, like porters from hotels, to explain to the newly-arrived student the merits of his school. While competition may contribute to the life of trade, competition in medical schools for a large class certainly does not contribute to the life of an individual entrusted to graduates of these schools. The larger the class of students and graduates, the bigger the fees to the Professor, the greater the eclat and prominence of the men who constitute that school, in the eyes of the public-so say the And the student often says, 'I will go where I Professors. can graduate most easily and certainly; I'll not run the risk of rejection in a high-standard school; I'll study after I get back home, when I begin to practice—killing some people, it is true, while I am doing it, but I will be making money the sooner.

"Now, the State Board of Examiners, selected from among the best men in the State, knows no graduate, college, or school; has nothing to do with the number of classes or fees; acts only for the best interests of the public and profession, and asks no reward, except the consciousness of a duty well performed. There are in this country and State, medical schools which are notable and honorable exceptions to those just described, and when the classes are large it is because of the honor which is attached to their diploma. The number of

these colleges is increasing, and nothing has contributed so much to them as the Medical Examining Boards of the various States.

"In Philadelphia, New York and Boston, at various times, houses for selling bogus diplomas have been established, and any man anywhere could buy a diploma to practice medicine at from five to fifteen dollars. Recently, at Clifton Forge, in this State, one of these agents from New York was offering to sell diplomas for a small sum of money. Does not the Legislature owe it to the people to protect them, as they can do by the Medical Board, from these impostors and harpies?

Who oppose the Examining Board? Not the Faculties of the two institutions owned by the State of Virginia, for both of these schools have formally endorsed the Board, and assisted in its appointment. The opposition comes from colleges whose Faculties are afraid to have their work inspected men who have slurred over their course or have been incompetent to perform it. It comes from graduates of those colleges who, in the easy and hurried way in which they have been 'pushed through,' recognize their inability to stand the honest examination required. And it comes from the personal friends of these men. They say the law is faulty, its execution imperfect, its officers not well chosen. Granted, for the sake of argument only. Will you abolish every law for such causes?

If so, we will have no law.

"We say both colleges of Virginia endorse this law, and we believe that both Faculties are now in favor of its enforce-It is certainly to the interest of both to do so. the petition of the students of the Virginia Medical College was not the action of the Faculty of that institution. It is not necessary for the Faculty to disclaim it. To endorse it would be an admission of weakness on their part, of incompetency, or a wilful neglect of the work they have been appointed to do; of an inability or an unwillingness to fairly cope with other schools—in fact, a plain bid to lazy and unprepared students to seek a low-graded school. It was the natural desire on the part of the young men to escape an ordeal which, if properly regarded, should have made them court it, for the sake of the College which sent them forth—for the sake of the public, and the noble calling they have selected. The idea that the Faculty has put in that petition is, of course, false. This petition contains some mistakes, which we take the trouble to correct.

"1. The statement in the first section of their petition, saying that the students pay more for their tuition in the Medical College of Virginia, is not true. (See fees required of students at the Universities of Maryland, Pennsylvania, New York, and elsewhere.)

"2. The statement that there is some antagonism on the

part of the Board to the Medical College of Virginia is absolutely unwarranted. When the Board examines a student, he is only known to them by a number assigned to him. The name of the student, or where he graduates, is not known.

"3. The statement with regard to the law on this subject in New York, etc., is only partly true, and, as stated, is calcu-

lated to mislead.

"4. The statement that the State Board was 'selected at random' is not in accordance with facts. The Board was carefully selected by the Medical Society of Virginia, an organization representing nearly one-half the physicians in the State.

"5. The statement in section 5 of the petition, in which the practice of medicine is said to be a *trade*, etc., shows a poor appreciation of the dignity of their calling, and is only an additional evidence of the necessity for a higher grade of medical

education, for which the whole profession is striving.

"6 and 7. The plea of poverty on their part, and the expense of an examination, etc., is simply a blind. The Board meets directly after the colleges close. The fee to the Board is \$5. The cost for boarding at the houses where the students

generally stay is probably for three days about \$3.

"8, 9 and 10. These sections are answered by the questions and answers appended to this paper, which show more than anything else how grossly ignorant many of the graduates are, and what a fearful need there is to protect communities from men who hold a diploma, but are pitifully incompetent to take care of helpless sick and suffering people.

"Question. Describe the larynx.

"Answer. The larynx is composed of cartilage. The œsophagus passes through the larynx.

"Question. What is the function of the liver?

"Answer. Do not know.

"Question. Give best means of disinfecting clothing, rooms, etc.

"Answer. Do not know.

"Question. Give tests for arsenic.

"Answer. Sulphuretted hydrogen is one. Don't know rest.

"Question. Give test for mercury."
Answer, Do not remember.

"Question. Give dose of tartar emetic.

"Answer. Ten grains. (Should have been 1-12 to 2 grains.)

"Question. Give dose of sulphate of atropia.

"Answer. Hypodermically, 10 grains; by mouth, 60 grains. (Should have been from about 1-120 to 1-90 of a grain.)

"Question. Give dose of corrosive sublimate.

"Answer. One grain. (Proper dose, 1-30 to 1-10 of a grain.)

"Question. How would you treat placenta prævia?

"Answer. I don't know what it is. (It is a very dangerous and common complication of pregnancy.)

"Question. Give dose of powdered cantharides.

"Answer. Forty grains. (Proper dose, 1 to 2 grains.)

"Question. What is the source of iodine?

"Answer. It is dug out of the earth in blocks like iron. (It is gotten almost entirely from sea-weeds.)

"Question. Describe dengue or break-bone fever.

"Answer. By four applicants: A fever that comes on soon after the bones are broken. By one applicant: The patient should be cautioned against moving, for fear the bones should break.

"Question. Describe the peritoneum.

"Answer. It is a serious membrane lining the belly, and extending into the chest, covering the heart and lungs. (Certainly there is not a man who ever witnessed a hog-killing but what knows that the cavities of the belly and the chest are

separated entirely by a stout muscular partition.)

"We beg leave to add a plea for the Amendment proposed, which is to make the applicant appear before the Board, and not any three individual members of the Board. In case of sickness, or, in the opinion of the President of the Board, for other good cause, when an applicant has been unable to appear, he may be permitted to come before three members of

the Board, to be selected by the President.

"In the first place, the practical working of the law has demonstrated that in many instances applicants for permission to practice medicine do not confine themselves to their district boards, but go about to different members of the board, as their individual fancies may dictate, and incur as much, if not more loss of time and money than they would do by attending regular sessions of the Board: these sessions are so arranged as to time and place, that graduates coming to Virginia from the different medical schools of this and other States, can present themselves on their way home at a minimum loss of time and money. Individual examiners cannot do justice to applicants: First, the applicant comes to the member of the Board in the country as a guest and with a story of poverty, with parents and sisters dependent on his passing this examination, and there is not a member of the Board who can be altogether deaf to these appeals. Entertaining this guest for three or more days, is not always agreeable or convenient to the country examiner. Second, the examiners cannot maintain a suitable watch over applicants, as has, unfortunately, on more than one occassion, been proven necessary. The applicant writes out his answers to the questions proposed in the office of the examiner, where he has to contend with the temptation offered by well-filled book cases and a table full of medical literature of most recent dates; and though regretting the necessity for such a charge, it has often been found that the temptation has been yielded to. Then again some four hundred

physicians of this State have petitioned the Legislature to retain the medical law upon the statute books, and to render it

more effective by amending it as above.

"Surely our law makers will not lend a deaf ear to such a number of petitioners, nor can there be any doubt that the law and its amendment would pass, by a large popular vote in the entire State, if it were properly and fully explained to the citizens.

"H. GRAY LATHAM,

"President Va State Board Medical Examiners.

"Hugh T. Nelson, Secretary.

"P. S.—This paper was read by representatives of the Board of Examiners to a committee of the House, Jan. 11, 1888.

"A majority of the members of the Faculty, and a number of students of the Va. Medical College were present, and addressed the committee. We regret to say that the Faculty, while expressing their belief in the value of Examining Boards in the abstract, were very warmly opposed to any examination of their students, and their speeches amounted to an earnest protest against the Board, and in favor of the bill which

has been presented for its abolition.

"We know that the individual members of the Board, a large number of whom are graduates of the Va. Medical College, have the kindest feelings for the Faculty, and if the Va. Medical College has been referred to so often in this paper, it is because of the strange attitude assumed by this Faculty, it being the only organized body, we can with truth say, the only medical men in the State, opposed to the Medical Examining Board.

"This explanation seems demanded."

The influence upon the Legislature of the students' petition was greatly increased by the attitude of prominent members of the Faculty of the Medical College of Virginia, several of whom appeared before the Legislative Committee of the House and Senate, and opposed the amendment asked for by the Medical Society of Virginia and the Board, and earnestly urged that the graduates of their school be ex-

empted from the requirements of this law.

Several years ago Dr. Wm. C. Dabney, then President of the Board, wrote to Drs. James L. Cabell, of the University, and M. L. James, Dean of the Medical College of Virginia, and desired to know the attitude of their respective Faculties towards that feature of the "Medical Law" which required all graduates to appear before the Board. Both replied that their respective Faculties endorsed fully the law in every particular, and reference is made to this fact in the circular letter of the physicians, which circular is presented

in the early part of this report. Having these letters in our possession, we deemed it best to have copies of them printed and distributed to members of the Legislature.

It may not be my mission to do more at this time; but there were some conclusions forced upon us by our late ex-

perience, which I think merit careful consideration.

The strongest point urged against the proposed change in the "Medical Law" was that it would be a great hardship to require the men from the remote sections of the State, who might graduate at the Western Schools, to travel all the way to Richmond to attend our spring meetings. point was urged with effect, and many members of the General Assembly representing the remote sections of the State on this account opposed the change. It was the only just and strong ground of opposition; and however fair our action may be, so far as those sections are concerned, the fact remains that some in and out of the profession in those districts were opposed to the change, are now opposed to it, and probably will continue their opposition until satisfied that our action is not an injustice to the poor, struggling young man. We are not alluding to those members of the General Assembly whose opposition seemed to result from an unwillingness or inability to understand the mission of the Board, but to a class of Representatives who honestly wished to do right, and who had been convinced that injustice would be done their constituents, and felt it their duty conscientiously to give their constituents the benefit of their protection.

The legislator whose opposition springs from ignorant, selfish and personal ends, is beyond our influence; but the honest representative, protecting his constituency, should have our respect, and his views our careful consideration. So positively convinced are some Representatives from Southwest and other remote sections of Virginia that our policy is an injustice to their constituents, that our warmest friends in the Legislature assured us that we will have this fight over and over again until we do something to satisfy their demands. We are therefore urged to arrange to have at least one meeting a year at some central point in Southwest

Virginia—say Roanoke or Wytheville.

The successful mission of this Board should have as much the interest of one citizen as another. But if any not members of the Board are to be specially remembered as active workers with your Executive Committee in securing the amended law, we should particularly mention Drs. L. Ashton, of Falmouth, E. W. Rowe, of Orange, Blackford and Terrell, of Lynchburg, Montague, of Stafford, Webb, of Rockingham, Harvey Black, of Marion, Hunter McGuire, Edwards, J. A. White, Lewis Wheat, Michaux, Roy, Ben. Harrison, Edward McGuire, and last, but not least among others of Richmond, Prof. Harris, of the Richmond College.

Your Chairman feels that he should not submit this report for record without making special mention and awarding unqualified credit to Drs. Robinson, Nash, Alex. Harris, Nelson, Latham, Conway, Finney, Z. J. Walker, T. J. Moore, and C. R. Cullen, members of this Board, for the sacrifice of time and money made by each of them in visiting this city during the session of the Legislature, and appearing before its Committees and advocating the change of the law which has been secured. Scarcely less effective was the work done by correspondence and petitions by Drs. Rawley W. Martin, W. J. Harris, John Herbert Claiborne, Douglas, Brown, W. P. McGuire, A. Trent Clarke and H. M. Patterson.,

[Signed] Hugh M. Taylor, Chairman Executive Committee, etc.

Dr. Thomas J. Moore, chairman of the committee appointed last October to secure certain legislation, presented the following report:

To Dr. H. Gray Latham, Lynchburg, Va., President of the Medical Examining Board of the State of Virginia:

Sir,—In compliance with the instruction of the Medical Examining Board, your committee submitted the resolution of the Board requesting the Medical Society of Virginia to raise a committee, composed of three of its members, to join your committee in a petition to the Legislature to amend the Medical Act, so as to require all applicants for license to practise medicine in this State to appear before the Board in session, and to repeal that part of the law permitting applicants to go before any three of the members of the Board that they might select.

This resolution was passed by the Society, upon the day of its introduction, by an almost unanimous vote. Thereupon the President of the Medical Society of Virginia appointed Drs. Wm. S. Christian, J. E. Chancellor and E. W. Rowe as members of said committee to act with your committee in carrying out the instructions of the Society.

Upon the following day Dr. Chancellor introduced a resolution reducing the number of members of the regular profession of the Board from 32 to 12, the Board to be in future

composed of one member from each Congressional District and two from the State at large. This resolution was adopted, and was referred to the joint committee for action.

Upon the same day Dr. Chas. P. Brock presented for the consideration of the Society a resolution requiring the committee to incorporate in its petition to the Legislature a request that the Medical Act be so amended as to require all applicants for examination to present a diploma from some reputable medical college. This resolution was likewise

adopted.

On the 14th day of December, 1887, the two committees met in the city of Richmond, and organized themselves into a joint committee by calling Dr. Thomas J. Moore to the chair and the appointment of Dr. Landon B. Edwards as secretary. After discussing the various propositions, the committee, at 11 P. M., adjourned to assemble at 11 A. M. upon the following morning at Murphy's Hotel. The committee met at the hour designated, and proceeded to act upon the several propositions that had been referred to it, and, with the following modifications, adopted the same:

The first proposition was so changed as to permit the President, under certain circumstances, to issue a special permit to an applicant to be examined by a Board composed of three members of the Examining Board—the members

to be designated by him and to act conjointly.

The second resolution was so modified as to increase the number of future Boards to 16 instead of 12. This was done in order to give to each one of the eight sections of the Medical Examining Board two members, so as relatively to insure the presence of at least one member of the respective sections at each meeting of the Board.

The third resolution was virtually adopted as it came from

the Society.

A committee of three, consisting of Drs. T. J. Moore, E. W. Rowe and Wm. S. Christian, was appointed to incorporate the above resolutions, as modified, into an Act, and request the General Assembly to pass the same.

There being no further business before the body, the com-

mittee adjourned.

Respectfully submitted, Thomas J. Moore, Chairman of Committee of Med. Exm. Board.

On motion, the two reports just presented were received and ordered to be recorded.

SECRETARY'S REPORT.

Charlottesville, Va., April 17, 1888. Secretary's Office, Medical Examining Board of Va.

Dr. H. Gray Latham, President Medical Examining Board of Virginia:

In response to instructions from yourself, I beg leave to transmit to you my report, which is herewith most respectfully submitted.

Almost immediately upon my return home from the fall session of the Board, held in Richmond in October last, Dr. Alexander Harris wrote me requesting a copy of the minute constituting him a committee of one with power to employ counsel to have the prosecution of Dr. T. L. Booton, of Rappahannock, pushed at once-

The necessary papers were forthwith forwarded to Dr. H., and under date of December 12, 1887, he writes me as follows:

"Dr. T. L. Booton was indicted, plead guilty, and the penalty imposed (fined) to-day. I am glad to report that the Attorney for the Commonwealth and the County Judge both exhibited commendable zeal in enforcing the law, and it was because of my objection, as the representative of the Board, that Dr. Booton was not sent to jail till the fine was paid.

"I agreed to pay additional counsel, I. P. Jeffries, Esq., twenty-five dollars. I have travelled forty miles and spent two days in prosecuting the case, with an outlay in cash of three dollars per day.

Truly and hastily,

[Signed] ALEX. HARRIS."

In a former letter Dr. Harris had informed me that he thought, after taking legal advice in the matter, that that portion of the minute sent him with reference to the prosecution of the Commonwealth's Attorney and Commissioner of Revenue for Rappahannock county had best not be insisted on.

The expenses incurred by Dr. Harris were paid out of

funds in my hands as Treasurer of the Board.

Early in the month of December, Dr. W. W. Douglas, of Warsaw, sent you, through my office, his resignation as a member of the Legislative Committee; and, on instructions from yourself, I transmitted to Dr Z. J. Walker, of Blacksburg, his appointment to fill the vacancy.

On or about the 5th of December, Dr. Landon B. Edwards, Secretary of the Medical Society of Virginia, informed

me that he had called the Committee on the part of the Society to meet the Legislative Committee of the Board, at his office, in the city of Richmond, on the evening of the 14th of the same month. The members of the Legislative Committee of the Board were forthwith notified and met the gentlemen on the part of the Society at the time and places

specified.

The result of the work done by this Joint Committee was that a set of resolutions differing but slightly from those framed by the Board and the State Society were drawn up and presented to the Legislature by Dr. T. J. Moore, who had been elected chairman of the Joint Committee—the position of chairman having been first offered to Dr. J. E. Chancellor (an appointee on the committee by the State Society) and declined. The resolutions adopted by the Joint Committee differed from those originally proposed in that, in that one looking to an abolition of "individual examinations," a proviso was inserted allowing special examinations privileges in case applicants were prevented from attending sessions of the Board by sickness, or for other cause deemed sufficient by the President.

In the resolution originated by Dr. Chancellor—having for its object the reduction of the number of members of the Board—the resolution was made to read, "one from each Congressional District, six from the State at large, and three homeopaths," making the membership of the Board nineteen instead of fourteen, as contemplated in Dr. Chancellor's reso-

lution.

The resolution embodying the presentation by each applicant of a diploma as a prerequisite for examination, and known as the "Brock resolution," was not altered by the committee.

The disposition made of these resolutions by the General Assembly will be seen from an inspection of the amended law, a copy of which is embodied in these proceedings.

As Secretary of the Executive Committee of this Board, and on authority of its Chairman, Dr. Hugh M. Taylor, Dr. E. W. Rowe, of Orange, was employed to go down to Richmond and push the desired amendments with members of the Legislature. Dr. Rowe's expenses have only been paid in part, and it is hoped that the Board will order that he be remunerated in full.

My own expenses, and those of Dr. Z. J. Walker, in attending the session of the Legislative Committee above mentioned, were ordered paid by the Committee; and I have paid my

own expenses once besides on one of my four additional visits to Richmond in connection with the proposed amendments.

As soon as the amended law passed both Houses of the Legislature, and received the signature of His Excellency, Governor Fitzhugh Lee, circulars were sent notifying the members of the Board of the fact, and, after consultation with yourself and the other members of the Executive Committee, it was decided to delay the examinations from the 2d to the 3d Wednesday in April. The grounds for this change were that some of the Eastern medical schools had lengthened their sessions and did not close till the 15th of April. The most prominent medical schools of the country were notified of the time of the examination, and several of them replied endorsing this Board—notably the University of Maryland and the University of Pennsylvania. Also, notice to the same effect was published in the Virginia Medical

Monthly and the Richmond Dispatch.

Under date of March 24th, 1888, I received a communication from the Secretary of the State Medical Society, stating that the Executive Committee of that body had nominated to the Governor of this Commonwealth Dr. James Parrish, of Portsmouth, to fill the vacancy in the Board occasioned by the removal of Dr. L. Lankford from the Second Congressional District of this State. I communicated the fact to yourself, and was instructed to assign Dr. Parrish to the Section on Anatomy as soon as he notified me of his acceptance of the position. After some delay, Dr. Parrish wrote me, notifying me that he had accepted membership on the Medical Examining Board of Virginia and asked for instruc-The requests contained in his communication, and your instructions with regard thereto were immediately complied with, and circular letters at once addressed to each member of the Board notifying them of Dr. Parrish's appointment, acceptance, and assignment to the Section on

The clerical work done by your Secretary in the vacation of the Board just closed has been heavy and arduous; but with the advent of the new *regime* he hopes the duties of the office may be less onerous, and done more to his own if not

more to the satisfaction of others concerned.

In conclusion, I would state that, after the passage of the amended law, on instructions from yourself, I issued a permit to Dr. Z. Vance Sherrill, of Washington county, Va., to be examined in his own Congressional District. The reasons stated by yourself for thus making the case of Dr. Sher-

rill a peculiar one was that the representations of Dr. John S. Apperson, of Marion, put it out of your power to refuse this application, particularly in view of the fact that the Board wished to stand in an attitude conciliatory to the Southwestern section of the State.

The statistical reports at the close of these proceedings ex-

plain themselves.

I am, sir, very respectfully,

Your most obedient servant,

Hugh T. Nelson, M. D., Sec'y Med. Exm. Board of Va.

On motion, the recommendations contained in this report were approved.

Dr. Hugh T. Nelson then presented the

REPORT OF TREASURER MEDICAL EXAMINING BOARD OF VIRGINIA,
October 19th, 1887—April 17th, 1888.

1887. Cash Account. Oct. 19—Amount on hand	Dr.	Cr.
Oct. 19-Amount on hand	176 85	
1888.		
April 17—To receipts to date	34 99	
1887.		
Oct. 19—By copying		1 50
Oct. 19—By express charges on books to Richmond and		
return		1 00
Oct. 19—By porterage on books to Capitol and back		30
Oct. 19—By amount paid janitor at Capitol		5 00
Oct. 19-By " " Dr. Bryce, advertising session		4 50
Nov. 18—By paper for hectographing, large		1 00
Nov. 22-By 500 License Certificates, lined		18 50
Nov. 26—By expenses of Secretary to Lynchburg		5 50
Dec. 3—By printing circulars for Executive Committee		16 50
Dec. 3—By postage Dec. 3—By 500 Forms I, 500 Forms II		2 00
Dec. 3—By 500 Forms 1, 500 Forms 11		6 00
Dec. 14—By Secretary's expenses to Richmond		10 00
Dec. 14—By Dr. Z. J. Walker's expenses to Richmond		12 00
Dec. 14—By telegrams.		50
Dec. 19 – By express on papers		30
Dec. 22—By I. P. Jeffries, counsel in Board vs. Booton		25 00
Dec. 22—By Dr. Alex. Harris' expenses in Booton case 1888.		6 00
Jan. 10—By Secretary's expenses to Richmond		8 00
Jan. 13-By expenses in part Dr. Rowe and printing		20 00
Jan. 16-By amount refunded Dr. Geo. F. Tilson		5 00
Mar. 22—By stationery		5 80
Mar. 22 – By postage.		• 4 00
Mar. 31—By telegrams during Jan., Feb. and March		4 51
April 17—By express on book to Richmond		50
April 17—By 10 per cent. on gross receipts, \$34.99		3 49
April 17 - By amount on hand		44 94
	-	

On motion, the Treasurer's report was received and ap-

proved.

The reading of the official reports having been completed, and having been ordered accepted and spread upon the minutes, on motion of Dr. Robinson, it was

Resolved, That a session of the Board be held in Roanoke

City some time in the month of July, 1888. Carried.

After a good deal of discussion, it was ordered that the Board meet in the city aforesaid, at 8 P. M., Tuesday, July 17, 1888.

There being no further business, the business session of the Board was declared adjourned, and Wednesday and Thursday, 18th and 19th current month, were ordered spent in examination of applicants.

A report of the result of this examination is appended to

these proceedings.

Withdrew before finishing First Section.....

Remaining to be accounted for	• • • • • • • • • • • • • • • • • • • •		33
	No. of	t _o	RE-
Colleges, etc.	APPLICANTS.	Passed.	JECTED.
Medical College of Virginia	10	10	
University of Virginia	3	3	
University of Maryland	4	4	
College of Physicians and Surgeons, of Baltimo		2	2
Medical Department University City of New Yo		1	1
Bellevue Hospital Medical College, New York.			1
Jefferson Medical College.		I	
Medico-Chirurgical College	I		I
Columbus Medical College.	I		1
Undergraduates (all 2d course)	3	3	

Medical Department Howard University (colored) 2

Leonard Medical College (colored)

In the vacations of the Board, as specified in the "Alphabetical List of Persons Granted Certificates," etc., from April 11th, 1887, to April 17th, 1888 (see page 134) nine persons applied for license to whom the privilege has not been granted. Three stood one examination only—the law then requiring three—and did not apply to other Examiners; four were rejected for incompetency; one obtained a permit, but has never appeared before any Examiner; one received a permit, but returned it, and the fee was refunded him on order of the President of the Board.

26

Alphabetical List of Parties who Passed Satisfactory Examinations, and were Licensed by the Medical Examining Board of Virginia, April 20, 1888.

25. John F. Inormey	24. "J. R. Thomas	**	33	20. "Isaac Pierce	19. " J. B. Moorman	18. " A. M. Dupuy McCormick	17. " I. S. Marshall.	15. " Jefferson Kinney	14. " B. C. Jones	13. " J. W. Jackson (Colored)	12. Dr. J. W. Hope	II. Mr. E. W. Gee.	io. "W. H. Feddeman	9. " John Dunn	8. " I. S. De Jarnette	7. "A. A. Cannaday	6. "E. W. Baxter	4. Di. J. II. Ayers	3. Mr. W. D. AShburn	2. " W. E. Anderson	I. Dr. James Albert	NAMES.	
26. Mr. J. M. Winfree	Drewrysville, Southampton Co., Va	White Post, Clarke Co., Va	Old Church, Hanover Co., Va	Raleigh N. C.	Roanoke, Roanoke Co., Va	Berryville, Clarke Co., Va	Windsor, Isle of Wight Co., Va	Longdale, Alleghany Co., Va	Darville's, Dinwiddie Co., Va	Lynchburg, Campbell Co., Va	. Hampton, Elizabeth City Co., Va	Lochleven, Lunenburg Co., Va	Onancock, Accomac Co., Va	Petersburg, Dinwiddie Co., Va	Lewis Store, Spottsylvania Co., Va	Copper Hill, Floyd Co., Va	Norfolk, Norfolk Co., Va	Richmond, Henrico Co., Va	Pungoteague Accomac Co Va	Sutherland, Dinwiddle Co., va	Bellfast Mills, Russell Co., Va	Postoffices.	thing board of Faguette, April 20, 1000.
(Not a Graduate in Medicine.)	J. R. Thomas	College Physicians and Surgeons, Baltimore, 1888.	Med. Dept. University of Virginia, 1887.	D. A. Robinson (Colored)	Med. Dept. University of Maryland, 1888.	Med. Dept. University of Maryland, 1888.	Medical College of Virginia, 1888.	15. " Jefferson KinneyLongdale, Alleghany Co., VaMedical College of Virginia, 1888.	Medical College of Virginia, 1888.	Med. Dept. Howard University, D. C., 1888.	Medical College of Virginia, 1888.	(Not a Graduate in Medicine.)	Med. Dept. University of Maryland, 1888.	Med. Dept. University of Virginia, 1886.	Medical College of Virginia, 1888.	Med. Dept. University of City of New York, 1888.	College Physicians and Surgeons, Balto., Md., 1887.	Medical College of Virginia, 1888.	Medical Department University of Maryland, 1888.	Medical College of Virginia, 1000.	I. Dr. James Albert Bellfast Mills, Russell Co., Va Medical College of Virginia, 1888.	COLLEGES OF GRADUATION AND YEAR.	% 40, 1000.

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COLLEGE OF GRADUATION. Hahnneman Homocopathic, Philadelphia, Pa. Col. of Physicians and Surgeons, Baltimore, Md. University of Georgetown, D. C. University of Maryland. University of Pennsylvania. Wedical College of Virginia. (No record.) Medical College of Virginia. University of Maryland. (No record.) Wo record.) University of Waryland. University of Waryland. Wo record.) University of Virginia. University of Physicians and Surgeons, Baltimore, Md. Col. of Physicians and Surgeons, Baltimore, Md. University of Louisville, Ky. Kentucky School of Medicine, Lousville, Ky.	University of Virginia. Hosp. Col. Med., Louisvile, Ky. Geneva, N. Y.
Willson R. Allen (H). W. R. Arnold W. G. Ashby. J. C. Bynnes. J. T. Dolen. M. R. Drewry H. J. Edmonds. F. V. Fowlkes. F. V. Fowlkes. J. T. S. Gibson B. F. Hamell (?). Virginius W. Harrison J. T. Hume. J. T. Hume. J. R. Keersel L. Ingram. N. L. Kabler. J. R. Keersel L. Ingram. N. L. Kabler. J. R. Moore (Undergraduate) J. R. Moore (Marrison. J. M. Morgan. J. H. Morgan. J. R. Morrison. J. H. Morgan. J. H. Worgan. J. W. H. Ribble. R. R. Robertson. J. S. Smith. Z. Vance Sherrill (?).	J. M. Whitfield Wm. Willis. *Daniel Potter.

Report of Work done by the Medical Examining Board of Virginia, from its Organization, January 1st, 1885, to April 20th, 1888 inclusive.

Medical College of Virginia, University of Virginia, University of Maryland, Baltimore, - College of Physicians and Surgeons, Balto. Jefferson Medical College, Philadelphia, Vanderbilt University, Tennessee, Bellevue Hospital Medical College, N. Y. University of City of New York, N. Y. Med. Dept. Howard Univ., Wash., D. C. Med. Dept. Howard Univ., Wash., D. C. Louisville Medical College, Kentucky, Hospital Medical College, Kentucky, Kentucky School of Medicine, Louisville, University of Louisville, Kentucky, Detroit Medical College, Michigan, University of Mich., Ann Arbor, Mich, University of Pennsylvania, Philadelphia, Columbus Medical College, Mo., Med. Dept. University of Tenn., Nashville, Leonard Medical College, Raleigh, N. C. Hahnemann Homœopathic Med. Col., Phil. Heidelberg, Germany,	Applicants from each appearing herore the Board.	Applicants from each rejected by the Board.	25 23 9 2 4 4	Rejected applicants from each applying second time.	Second applicants from each rejected second time.	2	
University of Virginia, - University of Maryland, Baltimore, - College of Physicians and Surgeons, Balto. Jefferson Medical College, Philadelphia, Vanderbilt University, Tennessee, - Bellevue Hospital Medical College, N. Y. University of City of New York, N. Y. Med. Dept. Howard Univ., Wash., D. C. Med, Dept. Univ. of Georgetown, D. C. Louisville Medical College, Kentucky, Hospital Medical College, Louisville, Ky. Kentucky School of Medicine, Louisville, University of Louisville, Kentucky, Detroit Medical College, Michigan, University of Mich., Ann Arbor, Mich, University of Pennsylvania, Philadelphia, Columbus Medical College, Ohio, St. Louis Medical College, Mo., Med. Dept. University of Tenn., Nashville, Leonard Medical College, Raleigh, N. C. Hahnemann Homoeopathic Med. Col., Phil. Heidelberg, Germany,	28 33 33 12 3 5 7	0 8 10 3 1 1	28 25 23 9 2 4 4	3 5 2	1	3 2	
Medico Chirurgical Col. of Phila., Pa., Cincinnati Medical College, Ohio, Geneva Medical College, Geneva, N. Y. College of Physicians and Surgeons, N. Y. Colleges unknown, Non Graduates,	2 3 2 1 2 2 2 1 1 2 2 2 1 1 3 3 1 1 3 4 4 1 1 1	1 2 3 1	1 1 3 2 1 1 1 2 2 1 1 3 3 3 5 5	1	2	1	1 2
Total,		49	*171	21		12	-
" Individuals,	*223			21	9	12	3

^{*}These two columns would add up 226 and 174 respectively, but there were three applicants each graduates of two schools, †Schools for colored students exclusively; also one colored graduate from

Ann Arbor.

Board-eight in number up to April 20th, 1888; also the number of Individual Examinations conducted in vacation by each A Tabular Statement of the Members of the Medical Examining Board of Virginia, Showing their Attendance on the Sessions of the member. Names in italics are not now members of the Board.

COUNTIES COMPOSING RESPECTIVE CONGRESSIONAL DISTRICTS.	Accomac, Northampton, Northumberland, Westmoreland, Richmond, Lancaster, Matthews, Middlesex, Gloucester, Essex, King and Queen, Caroline and Spotsylvania.	Princess Anne, Norfolk, Nansemond, Southampton, Isle of Wight, Surry, Elizabeth City, Warwick, York, James City, and Charles City.	Henrico, New Kent, King William, Hanover, Goochland, and Chesterfield.	Prince George, Sussex, Greenville, Brunswick, Dinwiddie, Powhatan, Amelia, Nottoway, Prince Edward, Lunenburg, and Mecklenburg.	Pittsylvania, Henry, Franklin, Patrick, Floyd, Carroll, and Grayson.
Examinations in vacation.	1 2 2 1 1	7.10	6 1 5	15	13
Attend- ance out of 8.	State at large, 5 (out of 5 2 (out of 5 2 tst Cong. 5 5 District. 5	5 (out of 5 0 (out of 1	7	7 7 5	929
	State at large, Ist Cong. District,	2d Cong. District,	3d Cong. District.	4th Cong. District.	5th Cong. District.
NAMES AND DISTRICTS.	Dr. Frank D. Cunningham, deceased Wm. C. Dabney, resigned, Prof. Un. Va. "T. J. Moore, Richmond, Va	"L. Lankford, removed from District "Jesse H. Peek, Hampton, Va "Herbert M. Nash, Norfolk, Va	" R. A. Lewis, Richmond, Va. " C. R. Cullen, Richmond, Va. " O. A. Crenshaw, resigned."	" J. Herbert Claibone, Petersburg, Va "W. J. Harris, Blackstone, Va " Hugh Stockdell, Petersburg, Va	" Rawley W. Martin, Chatham, Va (W, L. Robinson, Danville, Va)

	PROCEEDINGS OF SOCI
Halifax, Charlotte, Campbell, Bedford, Botetourte, Roanoke and Montgomery. Frederick, Clarke, Shenandoah, Warren, Page, Rockingham, Rappahannock, Madison, Greene, and Albermarle.	Loudoun, Fairfax Alexandria, Frince William, Fauquier, Stafford, King George, Culpeper, Orange and Louisa. (Lee, Scott, Wlse, Dickenson, Buchanan, Tazewell, Russell, Washington, Smythe, Bland, Wythe, Pulaski, Giles, and Craig. (Highland, Augusta, Bath, Alleghany, Rockbridge, Nelson, Amherst, Appomattox, Buckingaam, Fluvanna and Cumberland.
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" Harvey Black, removed from District." " H. Grey Latham, Lynchburg, Va " A. Trent Clarke, South Boston, Va " Oscar Wiley, Salem, Va " Wn. P. McGuire, Winchester, Va " J. H. Neff, Harrisonburg, Va " Huch T. Nelson, Charlottesville, Va	

RICHMOND MEDICAL AND SURGICAL SOCIETY.

April 26th. Dr. Thomas J. Moore, President, in the Chair-

Treatment of Tetanus.

Dr. C. W. P. Brock thought if we accepted his germ theory as to the origin of the disease, * we might derive some benefit from the use, locally, of bichloride of mercury, to prevent the further generation of the poison. After the poison had been generated, if we could find out the nature of the poison, we should seek for an antidote. He was of the opinion that we knew nothing about the treatment of tetanus and thought as many would get well without special treatment as with it. He had had rather a peculiar experiance with tetanus during the war; about one half of the

cases he saw got well.

Strychnine, the alkaloids of opium and the tetanus bacillus produce in man almost exactly the same set of symptoms, and if from any cause we are unable to obtain the history of a case presenting these symptoms, we would be exceedingly embarrassed in our methods of procedure, for upon a knowledge of the cause in each instance, must largely depend our treatment. To differentiate by the one from the other by the outward and visible signs, and thereby determine the inward and invisible process, is by no means an easy thing to do. But fortunately in each of these conditions the brain is left in tact, and the patient is enabled togive the information as to whether he has taken strychnine or opium, or whether a wound, however insignificant, exists in any part of the body. Chemistry may yet be able to discover the antidote for the direful poison generated by the tetanus bacillus; but until that is done we will have to persue the usual course in such cases, with the hope, however vain, that some good may be done. Prevention by the use of such remedies as destroy the life of the tetanus bacillus should never be neglected.

Dr. M. A. Rust said he had treated no cases of tetanus recently. Several years ago he had a number of cases to treat and they died. Of his cases he recalled two resulting from splinters; one from a nail in the foot; one from a pistol wound of the hand, and one case he thought resulted from a badly treated wound. He relied principally upon chloroform and morphia, but had tried all the ordinary medicines used in such cases, and the results were altogether un-

^{*}See April No., 1888, of the Va. Med. Monthly, page 1-8.

satisfactory. He thought the entire subject is still an open field. We certainly know of no reliable treatment for te-

tanus at present.

The one point which has to be elucidated is, can tetanus arise without inoculation? Some maintain that it can; but we have, as yet, no proof. Tetanus, or trismus neonatorum, is referable to the soiling of the umbilical wound. Another interesting point is the fact that it is not uncommon to see suppuration, abscess, erysipelas, follow the insertion of the hypodermic needle—whilst tetanus from the same cause is extremely rare. This may be explained by the other fact, that the bacillus of tetanus is invariably found in company with a great number of bacteria, micrococci of suppuration, etc.; and—having less productive power and requiring a much longer time of incubation—it is, in most cases, crowded out by the said bacteria and micrococci.

Since the period of incubation is comparatively long, an early prophylactic treatment may promise some success, provided we are in time to apply it before the absorption of the *Tetanine*—(produced, so far as we know, in the wound—

has taken place.

Dr. Hugh M. Taylor was not prepared to accept unqualifiedly the microbic factor in the etiology of tetanus. If we accept the conclusion arrived at by Drs. Brock and Rust we must admit that we know very little about the treatment of tetanus. We must admit that the treatment heretofore adopted has been founded upon a wrong basis, and that as many recoveries would probably have resulted without therapeutical aid. What are we to do until scientific investigation shows the theory adopted by Dr. Brock to be well founded, and suggests and proves the efficacy of an antidote to the supposed poison of the microbe? It will not do to go to a case and sav we do not know the nature of this poison or a remedy, and consequently our hands are tied. We must do something, and we would be justly blamed if we did not persue the treatment which has averted a fatal issue in the greatest number of cases. It had been his misfortune a few years ago to see quite a number of cases, and all but one ended fatally. The case that recovered was of a subacute type, and he thought the patient was simply sustained long enough to enable nature to eliminate the poison. We have, it is true, no specific for the poison of tetanus, but we have in chloral, etc., agents which act as splints to the nervous system and lessen the force and frequency of the nervous explosions. He thought he had lessened suffering

in several cases by giving the patient chloroform, and through a tube introduced into the stomach a pint or more of milk. This did away with the necessity of arousing the patient every hour to give a few spoonfuls of milk, and in doing so incurring the inevitable risk of exciting convulsions.

Dr. Lewis Wheat had only seen two get well—the same cases referred to by Dr. Taylor. He thought these cases were sustained long enough for the poison to be eliminated.

He knew of no specific treatment.

Dr. Moses D. Hoge, Jr., alluded to the fact that amputation of injured parts and section of nerves had been resorted to in the vain hope that the transmission of the irritation would in that way be intercepted.

Large Fibro-Myxoma Polyp Removed from Post Nasal Space.

Dr. Joseph A. White exhibited an enormous fibro-myxomatous polyp which he had removed from the post nasal space through the mouth. The case had been under the treatment of another physician for three months for catarrh. There was a constant discharge from the nose, especially the right nostril, and both nostrils were so obstructed as to necessitate mouth-breathing. Anterior rhinoscopy revealed nothing except a small grayish looking mass at the extreme back part of the right nostril, as much like section as any-The post-nasal examination showed a large thing else. growth filling the post-nasal space. With the help of his self-retaining palate retractor* he had no difficulty in encircling it from behind with a Jarvis' snare (curved canula) and steady traction soon broke it loose from its attachment. The point of origin was just in front of, and a little below, the Eustachian tube orifice. Dr. White showed the growth merely to call attention to the method of its removal, and to the fact that very large growths can exist in the post-nasal space without being detected by an examination through the nostrils.

Chorea and Hystero-Epilepsy Due to Nasal Disease.

Dr. White also reported two interesting cases, one of chorea, and another of hystero-epileptiform seizure due to the reflex influence of nasal disease. The case of chorea was a young girl with contortion of the muscles of the face, neck, etc., of 18 months' standing. Her father thought they might be due to some eye trouble, but not finding any, Dr. White suggested the nose and throat as the origin of the re-

^{*}See March number, 1888, Va. Med. Monthly.

flexes. She had enlarged tonsils and adenoid tissue. On their removal the muscular spasms disappeared. Dr. White observed that he was aware one swallow did not make a summer, but the result was a sufficiently convincing proof to him of the causation, as he had had several similar cases of seemingly the same origin and with the same gratifying results.

The other case was one of peculiar interest—a young man who had exhibited reflex troubles supposed to be due to nasal disease, as he had posterior turbinated hypertrophies and adenoid tissue. Dr. White removed the hypertrophies with his galvanocautery snare (exhibited to the Society at a previous meeting), without any unusual manifestations. But the operation for removal of the adenoid tissue at the vault of the pharynx was followed a few hours afterwars by mental aberation, intense headache, and profound unconsciousness, with occasional muscular spasms. His friends telephoned for Dr. White in great alarm. When he saw the patient he found him in this condition of unconsciousness and it was impossible to rouse him. Pulse, temperature and respiration were normal. As Dr. White had seen such effects follow irritation of the pharyngeal vault in other cases, he did not think the patient in any danger. As Dr. Hugh Taylor had sent the case to him he thought he would like to see such a condition and sent for him.

As Dr. White expected, Dr. Taylor was much interested in what was an unusual phenomenon. Dr. White considered this epileptoform seizure (?) due to reflex vaso-motor disturbances in the cerebral circulation caused by the irri-

tation at the vault of the pharvnx.

Dr. Hugh M. Taylor remarked that the case reported by Dr. White, and which he had just seen with Dr. White, was one of the most remarkable manifestations of reflex nuerotic disturbances he had ever witnessed. If he had been called to see that man without knowing anything of his previous history he would have been alarmed and would have had serious suspicion of some dangerous intracranial disease. When he saw the patient he was perfectly unconscious, his pupils dilated, face flushed, throwing his arms about, pulling his hair, his eyes were fixed without a ray of intelligence, and he had been in that condition for four or five hours. The only encouraging feature was that respiration and circulation were normal. He knew there was no limit to the wide and varied field of reflex disturbances, but he had never seen the reflexes shown in exactly this way.

Dr. Brock asked Dr. White if he had not used cocaine in the operation, and if so could the condition have been

caused by that drug.

Dr. White in reply said he had used cocaine, but only a very small quantity, that the symptoms could not have been due to cocaine, because in cocaine poisoning, both the pulse and respiration are materially altered—in this case they were absolutely normal. Moreover, in this same case, he had often used cocaine previously, and three or four times as much at a sitting without any unusual manifestations. He was satisfied cocaine had nothing to do with causing the symptoms, and that it was a rational conclusion to refer them to the reflex impression of the traumatic irritation of the pharyngeal vault. In view of the numbers of recorded cases of chorea, epileptiform seizures, etc., reflexly produced by intra nasal and pharyngeal changes, he thought he was justified in his conclusion. It was not the first time he had seen this result, and, therefore, he was not at all alarmed. The first time it occurred in his experience the patient remained unconscious six hours and gave him great uneasiness. He thought it due, as he already stated, to vaso-motor changes in the cerebral circulation, changes that could easily be produced in a neurotic subject by irritation of the terminal filaments of the 5th pair and transmitted by the anastomotic connections to the superior cervical ganglion which directly controls the cerebral circulation. Dr. White thinks that different reflexes result from irritation of the 5th pair in different people because of different ganglia being weakened, and the reflex symptoms are produced in the domain of the special nerve centre or ganglion that has lost its resistance.

Phantom Pregnancy.

Dr. Geo. Ben. Johnston reported the case of a woman who had spoken to him, perhaps about five months before her expected confinement, asking him to hold himself in readiness to answer a call about the middle of March. She said she had already observed a very decided quickening. Having had four children he questioned her a little further as to the time of her quickening in order to determine as near as possible the date of her expected confinement. If her calculation was a correct one, she should have been confined at the time mentioned—namely: the middle of March. He thought no more of the case, but entered it on his obstetrical list. On the 17th of March he received an urgent message to come to see her. He had a consultation which

conflicted and was, consequently, late in reaching her house. In the meantime she had grown so eager that she had sent a second message. When he arrived he found her with her granny and all preparations for delivery. When he entered the room she exclaimed, "Doctor, I am so glad to see you; I was afraid you wouldn't get here in time." She was lying on her back with her thighs somewhat flexed. She was crying, and the woman with her was giving her all the comfort possible. When he approached her she was covered with only a guilt and a bed spread, and he could get a very good outline of her body. A single glance excited his suspicion that her surmises of pregnancy were incorrect. Pressing his hand upon her belly he found it soft and yielding. He quietly continued this sort of pressure down to her spine. Throwing off the bed cloths and examining her naked belly he found that there was no enlargement of the uterus whatever. She had gained considerable flesh and had not menstruated. When he announced to her that she was not in a family way she was very much disposed to consider that he was jesting with her, but when he convinced her she was not pregnant she was very much ashamed of herself, and forthwith got out of bed. He reported the case as a unique one in his experience.

Baby Weighing Fifteen Pounds and Fifteen Ounces at Birth--Difficult Instrumental Delivery--Hips of Child Retarding Birth--Mother Dying of Heart-Clot Twenty-Four Hours After Childbirth.

Dr. Landon B. Edwards reported the following case, presenting several points of interest: Mrs.—, aged about 37 or 38, height about 5 feet 6 inches, healthy appearance, though disposed to be fleshy, married some nine or ten years. never before pregnant, was taken down in her first labor April 11th—three days beyond her calculation of the 280 days. Labor progressed naturally until that night when the cervix opened sufficiently to allow feetal fæces to pass freely into the vagina—the "bag of waters" having been spontaneously ruptured so as to allow of dribbling some ten or twelve hours before. Breech presentation was clearly diagnosed, and was recognized distinctly several times both by the Doctor and the well trained nurse. The next morning, labor was still progressing naturally but very slowly. About midday of April 12th, during the administration of chloroform, very marked abdominal motions were observed. Examination after leaving off the chloroform revealed that spontaneous evolution had taken place and

that the head of immense size was now presenting-occiput forwards. Fæcal discharges stopped. Labor progressed slowly but still naturally, when by 6 P. M. the head had descended to the inferior strait where the size of the head seemed to retard further progress. Dr. Hunter McGuire was called by telephone with request to come with short forceps. About 8:30 o'clock, after a prolonged and very tedious effort he delivered the head with the short forceps. The delivery of the shoulders was also a very difficult matter; and notwithstanding the resort to every precaution, decided rupture of the perineum towards the anus resulted. But after the full delivery of the head, shoulders and body down to the waist, it required fully ten minutes or longer to deliver the hips. Every part of the pelvic cavity was filled by the child so that the doctors could not introduce a finger even high enough to see what was the matter, and no amount of manœuvring or pulling, either during or in the absence of pain was sufficient to deliver that portion of the child in time to prevent fatal compression of the umbilical cord. The after-birth was slightly adherent, but uterine contractions of the character of hour-glass made its delivery difficult. The child was the largest one either Dr. Edwards or Dr. McGuire had ever seen born. It was a female, well developed in every respect except the flexor tendon of the right index finger was greatly contracted, and the right foot was greatly drawn inward by talipes varus. Her weight about an hour after delivery was fifteen pounds and fifteen ounces. Her length was between 23½ or 24 inches. The ruptured perineum of the mother which had also been more or less unavoidably bruised, was dressed antiseptically. The patient was properly attended to by the nurse, and afterwards went to sleep, but her sleep was neither prolonged nor did she feel as refreshed as usual the next morning. Reaction was not good and vet there was no impending symptom or sign. At 6 P. M., April 13th, Dr. Edwards saw her again; she was then improving. About 7:30 o'clock he was telephoned to come immediately. She had raised herself up in a half sitting posture in bed, and immediately she fell back in what was supposed to be a faint. When Dr. Edwards reached her she was pulseless as to the radial or any of the superficial arteries, but her heart was beating rapidly though faintly-each beat growing weaker and Respirations were rapid, labored and shallow. Her face was ashy pale; her eyes open and pupils widely dilated: she was extremely restless—even jumping up in

bed, tossing her arms about, and falling back and rising again, gasping for breath. A wild sort of anxious semi-comsciousness soon passed into unconsciousness, and then death claimed its victim. This lady had lost her only sister in childbirth with triplets, and some other relatives had died in labor. During the latter months of pregnancy, she was constantly impressed, more even than is usually the case, that she would likewise die. Dr. Edwards believes the cause of death is described by some writers as cardiac embolism, or "heart-clot." No autopsy.

This child is believed to be the largest one ever born in Richmond. In fact there are but few cases recorded in the

books that weighed more at birth.

It is the only instance the Doctors ever saw in which the size of the hips (which did not appear to be disproportionate to the size of the child), materially delayed labor.

The probable fatal heart-clot in the mother twenty-four

hours after childbirth is worth mentioning.

The spontaneous sudden evolution (in 15 minutes' time) of the fœtus in utero, after the breech had apparently become fairly well engaged in the pelvic brim, while the mother was well under chloroform—completely changing a breech into a vortex presentation—is an entirely new experience, or observation, so far as Dr. Edwards is concerned.

Original Translations.

From the French.* By R. M. SLAUGHTER, M. D., Theological Seminary, Va.

Diagnosis and Therapeutics of Diseases of the Stomach.

At the meeting of the Academic de Medicine, January 17th, 1888, (La Tribune Med. Jan. 22, 1888), Dr. Germain Sée made a communication on this subject. Experiments made by him with the reagent, lately discovered by Günyburg, phloro-glucine vanilline have given very satisfactory results. The phloro-glucine vanilline is a very sensitive coloring reagent. One drop of a solution of it, as employed by Günyburg, will, in the presence of a mineral acid, immediately give a wine red color to the solution, with the precipitation of beautiful red crystals. In the presence of organic

^{*}By an oversight these "Translations from the French" were omitted from their proper position immediately after "Translations from the German," page 107.

acids, lactic or acetic acids, for example, it gives no coloration; hence, its great value in the chemical examination of the gastric fluids—an important method of diagnosis. About 30 minims of gastric juice which may be collected with a Potain aspirator, are sufficient for the test. To cause the secretion of the gastric juice, the patient should take, 45 minutes before aspirating, one hard egg and a glass of water.

Dyspeptic patients may be divided into three groups: 1, Those in whom the quantity of chloro-hydric acid is reduced to a minimum. In this class are to be placed not only the patients with cancer but also the subjects of Bright's disease, tuberlcuosis and diabetes. In cases of cancer, the diminution of the chloro-hydric acid is a much more important diagnostic sign than the decrease in amount of urea eliminated. The gravity of this symptom is that in cancer all the functions—those of the intestine as well as those of the stomach—are compromised, and the aliments are neither digested, transformed, nor absorbed.

In this group also are to be placed the subjects of dilatation of the stomach, with or without cancer, perhaps of atrophy and amyloid of the stomach, and of the so-called mucous dyspepsia, resulting particularly from inanition,

marasmus, etc.

In mucous dyspepsia, the acidity of the gastric juice, is due to lactic acid, which is inert as regards digestive powers. The lack of chloro-hydric acid is no sign, however, that there is no digestion, for intestinal digestion can take the place of stomachal digestion. This is specially true in the subjects of Bright's disease, diabetes and tuberculosis, who so easily complain of the stomach. In the second group are to be placed those cases in which there is hypersecretion of chlorohydric acid, and the researches have revealed the surprising fact that there exist a very large number of diseases in which this is the case. In the third group are to be placed those cases in which the quantity of chlorohydric acid is variable, the gastric juice being sometimes acid, sometimes alkaline.

Three kinds of medication are to be employed in gastric affections, *chloro-hydrotherapy*, alkalinotherapy, and the mechanical evacuants and the physico-chemical agents.

Chlorohydric acid alone, or associated with pepsin, appears always of doubtful value, and is certainly contraindicated in cases of chlorohydric hypersecretion. The acid sensations of pyrosis and the so-called forming gases are not always to be considered as signs of acid dyspepsia, for in

these cases the gastric juice may be neutral or very feebly acid. The question can only be settled by testing. Chlorohydrotherapy is indicated in those cases in which there is little chlorohydric acid, or in those cases in which the organic acids predominate. It is thus indicated in mucous dyspepsia and dilatations. Alkalinotherapy is useful and is indicated in those very frequent cases of excess of acid

and should be used in large doses.

The evacuants are applicable in all cases of atonic affections of the stomach and intestines. Lavage, which is a mechanical evacuant, is often necessary. If there is pseudo dyspepsia arising from the condition of intestine the purgatives or laxatives are indicated. The popularity of the purgatives and drastics in the treatment of dyspepsias was evidently because they relieved these pseudo-dyspepsias having their origin in the intestine.

As regards regimen, milk is prescribed at random *urbi et orbi* in all kinds of digestive troubles. Simple ulcer of the stomach is the only disease calling for the exclusive milk

regimen.

Another regimen—that of white meats and vegetables—causes the patient to run the risk of inanition, and has few indications. A third regimen, but little used now, consisting of the amylaceous foods, is of great value in many cases, and especially so in cancer of the stomach. It is, however, to be positively forbidden in cases of chloro-hydric acid hypersecretion.

Meat and fish can be given freely in cancer and in hyperchlorohydric secretion, when it is useless and hurtful to

hold to milk and white meats.

In Le Practicien of Jan. 30, 1888, we find the following

discussion upon the above paper:

Dr. Dujardin Beaumetz said that the presence or absence of chlorohydric acid in the stomach was not sufficient to affirm or deny the existence of cancer, and the diagnosis of the disease rests upon a clinical problem, the solution of which was aften obscure, and sometimes impossible. The functions of the economy change the composition of the gastric juice. It becomes less acid when one has profuse sweats, or at the period of menstruation in the female, and it would be a great mistake to base therapeutic measures exclusively upon the absence of this acid. The term dyspepsia as the name of a disease should disappear. It is only a symptom, just as vomiting is a symptom. It is necessary to understand first to what affection of the stomach is the dyspepsia due and to institute treatment accordingly.

Dr. C. Paul remarked that neither Rommelaëre nor himself had ever pretended that, being given the urine of a patient, cancer could be diagnosed by the quantity of urea it contained. It was only a diagnostic element to be taken

into consideration in conjunction with others.

Dr. G. Sée said the quantity of urea contained depends absolutely on the amount of food taken. If a cancerous pataient eats, there will be urea. If he is in a state of inanition, there will be very little urea. Frenchmen excrete about 20 grammes of urea per 1,000 grammes of urine, while the English and Germans, who are great eaters, eliminate 24 grammes and more. A patient of Dr. Dujardin Beaumetz excrted only 4 grammes, and the diagnosis of cancer of the stomach was made. Autopsy showed a hydatic cyst. This patient did not eat. Dyspepsia is not a symptom, but is a defective chemical operation which is due to abnormal chemical composition of the gastric juice. It is always necessary that the lack of chlorohydric should be declared several times to be sure of the diagnosis.

Actinomycosis.

This disease is described as follows in the Gazette Médicale

de Strasbourg by Dr. Eug. Mulle:

Actinomycosis is an infectious parasitic disease which most generally attacks horned animals, more rarely hogs, and occasionally human beings. Bollinger, in 1877, discovered the disease in animals of the bovine species, and named it actinomylkosis on account of the particular elements, actinomyces, found by him; and he described and classed it among the parasitic diseases. Israël, in 1878, found the disease in the human subject, studied it and described its pathognomonic characters and clinical history. Since that time some cases have been observed in the human subject but they are very few, only one case being known to have occurred in Germany, that described by Dr. Paul Meyer in the Gazette Médicale de Strasbourg.

The infectious element, the actinomyce, is a fungus (champignon) which presents itself under the form of small grains, the size of a grain of semolina (seloule), yellow, white or green in color. These grains under the microscope are composed of corpuscles in the form of clubs with large extremities and becoming smaller towards the centre, where they

unite and are attached to a mycelium feutré.

The special disposition of these elements, beginning at a centre and radiating towards the periphery gives them their name actinomyces (active, bams, spokes, mices, fungus). The

organic lesions produced by this fungus in the human tissues are, with the exception of some cases of very rapid progress, those of a neoplasm of a suppurative form and slow course. The evolution of the disease is that of a cold abscess. and of such does it present all the anatomical characters: sero-pus, dead tissue, fungosities and tissue in the state of fatty degeneration;—a remarkable analogy to the evolution of tuberculous lesions. In the cases seen, the diagnosis was settled upon opening the abscess, for it presented to view a large quantity of porraceous green corpuscles, such as are not usually found in abscesses, and of which microscopic examination was necessary. The green color is to be noted, for generally the actinomyces are white or yellow. Was this color an indication of their hepatic origin, or did they contain biliverdine? The green color was very marked in the first grains encountered, but lessened in some degree as the actinomyces were collected at a greater distance from the liver. Those which were expectorated were only slightly colored. So far as I remember the literature of the subject, green actinomyces have only been found in abscesses in the hepatic region. The disease was long and painful, and its fatal issue confirmed the prognosis of Israël, who says that in malignancy, actinomycosis is not surpassed by any other chronic disease. This, unfortunately, will be most often the case. The point of departure being most often the digestive tract, the fungus, before an exact diagnosis can be made, will penetrate into the deep organs, and a total and complete extirpation will be an impossibility.—L'Union Med. du Canada, Jan. 1888.

Analyses, Selections, etq.

[Prepared by M. D. HOGE, Jr., M. D., Richmond, Va.]

Shortening of the Broad and Utero-Sacral Ligaments.

Dr. Geo. H. Noble, of Atlanta, Ga., says (Atlanta Med. and Surg. Jour., April, 1888) he has been practicing the operation of shortening these ligaments for the past four years. The structure is generally the result of cellulitis complicated with diseases of some pelvic organ. Apparently there is no waste of tissue, because while the ligaments have become shorter, they are relatively thickened. The first step is to relieve the pelvic tenderness and free the ligaments of irri-

tation; this is best done by some simple support, taking care not to use too much force. The operator, in treating the broad ligament, should use the hand opposite to the side in which the disease is situated. For instance, if it is the left, two fingers of the right hand should be introduced and placed on the left side of the cervix; then the fingers of the other hand are brought down from above the pelvic brim by depressing the abdominal walls, and are placed on the same side of the uterus at the fundus. Very gentle traction in the direction of the healthy ligament is made a few times, and maintained until some discomfort is felt.

For the utero-sacral ligament, the first two fingers of either hand are introduced posterior to the cervix; the finger-tips of the other hand then depress the abdominal walls, and are applied to the posterior surface of the fundus. The uterus is then gently drawn forward a few times, and held as before. A small tampon, sufficient to bear the weight of the uterus, should be applied after each operation. The question of how hard should we pull upon the ligaments, and how much should they be stretched, are difficult to define precisely. The best answer is to make just enough traction to feel that you are barely putting the tissue upon the stretch. As to the second question, you should endeavor to stretch the ligament about twice as much as it has been contracted. The time consumed in this mode of treatment varies from a few weeks to a year and a half.

Furuncular Inflammation of External Auditory Canal.

Dr. S. Latimer Phillips, of Savannah, Ga. (Atlanta Med. & Surg! Jour., April, 1888), says one of the commonest troubles we meet with in daily practice is a circumscribed inflammation of the cutaneous and subcutaneous tissues of the external auditory canal. Those most predisposed to it are people in general bad health from dissipations of various causes. Entrance of sea-water, flow of pus from the tympanum, chronic eczema of the canal and possibly picking and rubbing the ears, are fruitful causes. It is more frequent in females than males. The symptoms are usually local, pain in the face and head, and dullness of hearing. all of which disappear when the pus discharges. are no complications, prognosis is always good. treatment, the various causes should be looked for. Digestion should be improved; lassitude and want of appetite helped by tonics; and all forms of dissipation given up. Leeches applied about the ear do but little good. Warm

water frequently instilled into the ear relieves pain very much. But the best method is free and deep incisions into the parts, followed by a washing out with a warm solution of bichloride of mercury (1 to 20,000). Sulphite of calcium in small doses is recommended.

Comparative Anæsthesia.

Dr. W. W. Dawson, of Cincinnati, O., gives (Nashville Jour. Med. and Surg., April, 1888) a clinical lecture on the above subject. After having lost a patient himself, and having read of the sad experiences of others, he has been obliged to abandon chloroform and adopt ether. The A. C. E. mixture, it is argued, is a safer remedy than chloroform, because the ether and alcohol stimulate the heart; but he feels that in using this mixture he is courting two dangers. It is, nevertheless, a very pleasant mixture to administer.

Eczema.

Dr. Jno. S. Coleman, of Augusta, Ga., writes in glowing terms to the Southern Practitioner, April, 1888, from Indian Springs, of the curative effects of the waters in all forms of eczema, the bête noir to most physicians. He claims for it prompt efficacy in rheumatic, hepatic, stomachal, renal and bowel troubles. In his opinion, this water is as much a specific in eczema as is quinine in malarial troubles.

Government Should Aid the Medical Profession,

Judge Nesbit, in his address before the graduates of the Southern Medical College, is reported in the Southern Medical Record, April, 1888, as giving the following good advice: Many of the difficulties by which the medical profession is beset might be materially lessened if it had a little recognition and protection from the government. The Federal Government has paid more money in the investigation of pleuro-pnemonia and cholera in cattle and swine than for scientific research into all the diseases to which human beings are subject. In the State of Georgia, and under its Code, health and life are made subordinate to property and a great many other things.

Charge to Graduating Class.

Dr. A. M. West, of Memphis, Tenn., gives (Memphis Med. Monthly, April, 1888) the following good advice to the young graduates, but which applies as well to all of us: In the first place, the doctor must be a gentleman in every sense

of the word. Not a gentleman from policy; not a gentleman for the occasion; not a gentleman from mere force of circumstances; not a gentleman only in the presence of the high, the influential, and the aristocratic, but in the ranks of the lowly, the poor, and the dependent; not alone in the fashionably-furnished sick rooms where dwell wealth, beauty, refined chastity, and punctilious formality, but also in the humble cottage of the poor, where poverty stalks, and visages rough and pitiless greet the wandering gaze. The physician should endeavor to be pure and chaste in his thoughts, elevated and virtuously sensitive in his emotions, highminded in his actions, and in conversation free from profanity, slander, and reckless talk.

Scrofula.

Dr. N. F. Raines, of White Haven, Tenn., reported the following unusual case in the Memphis Medical Monthly, April, 1888: Mrs. X., et. 19, whose family history on the mother's side is good, but whose father, though intemperate, and syphilitic, is healthy-looking and large. She was a remarkably healthy and robust child, who began menstruating when 14 years old. All went well until the age of 16, when, towards November, 1885, a small fluctuating tumor was discovered on the back of the left arm. In December the tumor ruptured spontaneously, discharging a thin, curdy fluid, leaving a sinus six inches long. In February, 1886, a tumor like the first appeared in the right inguinal region; this, too, ruptured in three or four weeks. This was laid open and treated antiseptically. Towards the end of February, a similar tumor appeared on the back of the lumbar vertebræ. On opening, it discharged about two quarts of thin fluid, numerous cheesy masses, and some pieces of dead bone. About the middle of April, a small opening was found on the outer side of the left arm. It was found to be a sinus thirteen inches in length, which was laid open and dressed. Shortly after this, an abscess formed over the posterior surface of the left scapula. This was opened, and discharged a pint of pus and some dead bone. About the middle of June, another abscess formed midway between the sacro-lumbar articulation and the right trochanter. This was opened, and discharged three quarts of thin, curdy pus. While undergoing treatment, her general health and spirits were bad, but which were duly looked after. Menstruation appeared after twentynine months of suppression, and she gained nearly thirty pounds in weight.

If this disease is tubercular, with a tendency to progress, may these abscesses not become foci of infection, from which it might be conveyed to the vital organs? Some months later she made a fair recovery.

Progress in Obstetrics and Gynæcology in Germany.

Dr. E. S. McKee, of Cincinnati, O., gives, in the Memphis Medical Monthly, April, 1888, some of the impressions of a tour through Germany. He says: In acute vaginitis successful results have been obtained from suppositories of oil of copiaba and coca butter, each one drachm, and opium one-half grain. Olshausen and Ahfeld think that narrow pelves have some influence on the sex of the child, the majority being males. In the third stage of labor, among many German obstetricians, absolute non-interference is the rule. Cocaine applied to the vagina and cervix during dilatation is followed by good results. Credé teaches non-interference with the genitals before labor, making his diagnosis of position by external palpation. Chevne has reported an interesting case of vomiting in pregnancy, in which nothing abnormal in the organs could be detected. The patient was inconsolable at the idea of being pregnant. She was put under ether, and made to believe that the fœtus had been taken from her; the vomiting ceased from that time. method which is rapidly gaining ground is the conservative Cæsarean section of Saenger.

Typhoid Fever in Children.

The report of a lecture by Dr. F. Forcheimer, of Cincinnati, Ohio, is given in the New Orleans Medical and Surgical Journal, April, 1888. He said in brief: The disease begins suddenly in children, which is very characteristic. In the adult the history is indefinite; he tells you he has been feeling badly for several days; he can tell the day on which he was taken sick. In children the disease comes on so suddenly and seriously that the doctor is called within the first twenty-four hours. The child will probably be playing about in the morning, languid in the evening, and quite ill by morning. The patient does not locate the pain, but complains of bellvache; they generally refer abdominal pains to the epigastric region. Tenderness will be elicited on deep pressure in the iliac regions. Children frequently suffer from insomnia in the beginning of the disease. rule, they do not sleep during the night, but somewhat drowsy during the day. Epistaxis is common, but absent in many cases. The nose is usually dry, but not dry enough to cause sneezing. The tongue is large, coated, with red borders and red line in the centre. Cough and bronchial catarrh is present in nearly all the cases. A great many children and infants suffer from constipation. Diarrhea occurs during course of the disease, but is never severe. Enlargement of the spleen occurs in the majority of patients, but is not of much diagnostic importance. Vomiting is very frequent in the inception of the disease; hence we are often at a loss to know what we are dealing with. The changes in the intestinal tract are by no means so severe as in the adult, and are altogether different. The changes in Peyer's patches are localized, deep, intense, and do not extend into the large intestine; the child, consequently, suffers little from hæmorrhage from the bowel. The impression on the nervous system is most marked. We have nervousness, somnolence, wakefulness, headache, and also changing disposition of the child. Their temperament is often changed for a number of years after the attack. As a rule, the pulse bears no relation to the height of the temperature. This is one of the reasons why the disease is not more fatal in children, there is less danger of failure of the heart. Complications are by no means frequent. We most often meet with aphasia. One sequela in children, which is not observed in adults, is tuberculosis. The case is protracted for six, eight or ten weeks, or longer, and finally the child dies of tuberculosis of the intestines, acute miliary tuberculosis or tubercular meningitis. The only deaths from typhoid fever among children have been cases of this kind. Prognosis most favorable. The mortality during the first two months is greatest up; to the age of twelve years, the mortality is hardly over five per cent. As regards treatment, he believed that, in a number of cases, it can be aborted by calomel; this is followed by a dose of antipyrine. The diet should be absolutely fluid. He has seen hemorrhage occur from eating bread. Frequently a drop of dilute nitro-muriatic acid every hour is prescribed. He gives sustaining remedies, mainly whisky. and in antipyretics avoid everything tending to collapse Lukewarm baths are used with advantage.

Rapid Delivery in Eclampsia.

Dr. Fayette Dunlap, of Danville, Ky., contributes an article on this subject (*New Orleans Med. and Surg. Jour.*, April, 1888). He first reports a case of eclampsia. in which he resorted successfully to rapid delivery, and then remarks that

he is aware that his views are opposed to the majority of obstetrical authorities. In the outline of treatment, rapid delivery is given the last place, when all other means have failed. The methods of relief employed are practically the same, whether it be the result of reflex disturbance, anæmia, or spinal congestion. From statistics he finds that about fifty per cent of all women who have eclampsia before labor, perish; and that about thirty per cent. of the children are lost. Why not give rapid delivery a speedy trial? Even the saving of infantile life is well worthy of consideration. Emptying the uterus, as a rule, gives instant relief. If there is extensive nephritis, we are in a more favorable position to manage it.

Book Motices.

Language of Medicine. By F. R. CAMPBELL, A. M., M. D., Prof. of Materia Medica and Therapeutics, Medical Department of Niagara University, etc. New York; D. Appleton & Co. 1888. Demi-8vo. Pp. 318. Cloth. Prise \$3. (For sale by West, Johnston & Co., Richmond.)

This is a manual, giving the origin, etymology, pronunciation and meaning of the technical terms found in medical literature. In this day, when elementary classical education is so much neglected as a preparation for the study of medicine, this book comes in as a much needed aid to the intelligent use of medical terms and correct conversation. The first part of this work discusses many of the elementary principles of philology and etymology, giving illustrations from words in common use in medical literature. Then follows a brief linguistic history of medicine. Part II gives the majority of Latin medical words, with the principles of Latin grammar which should govern their use in writing and in speaking. In the Section on Orthopy, a long list of medical words commonly mispronounced is given. Part III, the principal words of Greek origin are stated, with illustrations of the methods of converting Greek words into Latin and then into English. Part IV gives the majority of medical words transferred from modern foreign languages. We wish we could persuade all our medical friends to study carefully the lessons contained in this well prepared work.

Essays on Hysteria, Brain Tumor, and Some Other Cases of Nervous Disease. By MARY PUTNAM JACOBI, M. D., Author of "The Question of Rest for Women During Menstruation," etc. New York and London: G. P. Putnam's Sons. 1888. 8vo. Pp. 216. Cloth. Price \$2. (For sale by West, Johnston & Co., Richmond.)

This is mostly a collection into book form of some of the papers contributed to periodical medical literature, which have established the authoress as a leader in neurological research and as a practitioner. To enter into a notice of these Essays would lead us beyond the space allotted to a book notice. They are all excellent productions of thought and pen, and afford ample food for profitable study and reflection to any one specially interested in neurological subjects.

Practical Treatise on Diseases of the Skin. Second Edition thoroughly Revised and Enlarged. By JAMES NEVINS HYDE, A. M., M. D., Prof. of Skin and Venereal Diseases, Rush Medical College. Philadelphia: Lea Brothers & Co. 1888. 8vo. Pp. 676. Price in sheep \$5.50; in cloth \$4.50. (From Publishers.)

No task belonging to editorial duty is more agreeable than that of conscientiously commending a good work on a given subject. In noticing this book we have that pleasure. Throughout the work, the nomenclature adopted by the American Dermatological Association has been conformed to. A useful glossary descriptive of terms used to define certain peculiarities of cutaneous symptoms is given in the early part of the book. The scope of the treatise has been to supply a text-book for students and practitioners as well. It includes almost every subject noted in other works on skin diseases. The descriptive portions of this treatise are plain and easily understood, and, above all, are very accurate. The therapeutical part is abundantly supplied with excellent recommendations. The picture part is well done. The value of the work to practitioners is great because of the excellence of the descriptions, the suggestiveness of the advice, and the general correctness of the details and principles of therapeutics impressed upon the studious reader.

Customary Treatment of the Hair Considered in Relation to the Remarkable Presence of Premature Baldness in the United States. St. Louis: Arthur R. Deacon. 1888. 12mo. Pp. 20. Cloth. (From Publisher.)

This monograph is designed for popular reading; but its

facts and deductions are alike valuable to the professional student. The cause of premature baldness is attributable largely to the free use of caustic alkalies in the way of shampooing, hair washing, etc. Undoubtedly the unknown author is correct in blaming barbers for much of the baldness that prevails. Soda and potash soaps, shampooing with alkaline and stimulating applications—such as cantharides, frequent "shingling," etc., are all to be condemned. When head washing is necessary, after drying the hair with soft towel, etc., use a substitute for the natural oily secretion of the scalp—some such preparation as beef marrow, combined perhaps with some of the essential oils which possess antiseptic properties. We wish we could get all barbers to read this book carefully. Their patrons certainly should do so. It is a good, useful monograph.

Modern Treatment of Pleurisy and Pneumonia. By G. M. GAR-LAND, M. D., Instructor in Clinical Medicine, Harvard Medical School, etc. 1888. George S. Davis, of Detroit, Mich. 12mo. Pp. 108. Paper. Price 25 cents. (From Publisher.)

This is a well prepared monograph belonging to "The Physicians' Leisure Library" (No. 7), relating to acute lung troubles and their sequelæ. Pleurisy is considered under the two headings of dry pleurisy and pleurisy with effusion. The latter may call for thoracentesis, determined by the distressed respiration, the great size of the effusion, and the long duration of the effusion. In cases of chronic pleurisy, where the fluid persists in re-accumulation after repeated tappings, Dr. Westbrook's ingenious treatment is suggested. Operative treatment for empyema is described. Cabot's pleurotomy is also well described, as is also the operation of thoracoplasty. Pneumonia is attributed to bacteria. The supportive treatment combined with the symptomatic method, Dr. Garland thinks forms the only satisfactory treatment thus far devised.

Atlas of Venereal and Skin Diseases. Edited by PRINCE A. MORROW, A. M., M. D., Clinical Professor Venereal Diseases, University of City of New York, etc. New York: Wm. Wood & Co. 1888. Large folio. In Monthly Parts, Each Containing 5 folio, Chromo-Lithographic Plates, and from 16 to 20 folio pages of Text. To be Completed in 15 Parts. Set \$30, payable \$2 on delivery of each Part. FASCICULUS IV. (From Publishers.)

In our April No., pages 69-70, we gave a full description of the character of this Atlas, and expressed our admiration

of the manner in which it was being issued. The plates in this Fourth Fasciculus represent (1) Large papular syphilide, and papular squamous syphilide; (2) Scaly syphilide of trunk and right arm; (3) papular and squamous syphilides of palms and soles; (4) Gyrate syphilide, psoriasis, condylomato lata, and acuminata of genital region; and (5) mucous patches of vulva and anal region. In the way of pictures that are true to nature, and in descriptive text, we cannot believe that any book on skin diseases exceeds the value of this Atlas. No one who proposes to devote anything like special attention to skin and venereal diseases can afford to be without this monthly series. Our limits prevent anything like a review notice; we propose only to tell what is to be looked for in each Fasciculos as it is issued, and to note whether or not the one "just issued" keeps up to the high standard of its advertisement. Fasciculus IV is fully in keeping with its predecessors.

Rules of Aseptic and Antiseptic Surgery. By ARPAD G. GERS-TER, M. D., Professor of Surgery, New York Polyclinic, etc. Illustrated with 248 Engravings and three Chromo-Lithographic Plates. New York: D. Appleton & Co. 1888. Cloth. 8vo. Pp. 332. (For sale by West, Johnston & Co., Richmond.)

The object of this volume, we are told in the Preface, is a systematic yet practical presentation of the Listerian principle that has revolutionized surgery within the last fifteen vears. Its contents are included in five parts. Part I, considers the subject of asepsis, as related to the preparation of the patient for an operation, the method of securing asepsis in wounds to be made in various parts of the body, etc.; in short, what relates to prevention of sepsis. Part II, takes up the subject of antisepsis—the methods of removing sepsis that has taken root. The greater part of this section is given to the recognition and treatment of phlegmon. III, treats of the aseptic and antiseptic treatment of tuberculosis. Part IV, is devoted to the antiseptic treatment of gonorrhea, and Part V, concludes the book with a consideration of the aseptic and antiseptic treatment of the external lesions of syphilis. The effort has not been made to present a systematic work on surgery, but simply to systematize our information in regard to Listerism. And yet of necessity so much of operative detail is given as to the various measures to be adopted, aseptically or antiseptically, in the operations about the various parts of the body, and each step of the operations is described so accurately, that this book

may well be classed as good authority among the standard

operative surgeries of to-day.

The various points brought out by the author are abundantly illustrated by drawing and descriptive text. The style of the publication itself is elegantly tasteful. All in all, no surgeon of to-day can afford to be without this book. Every minutia of an operation is so well given that a novice in surgery who follows the directions given must become a successful operator.

Diseases of Man—Data of their Nomenclature, Classification and Genesis. By JOHN W. S. GOULEY, M. D., Surgeon to Bellevue Hospital New York: J. H. Vail & Co. 1888. Clo h. 12mo. Pp. 412. (From Publishers).

In a great many instances the present nomenclature of disease is so defective that the name carries with it neither an idea as to the nature of the disease nor defines its extent. Again, when technically considered, we find the conglomeration of two or more languages to form one name. Dr. Gouley's prominent idea is to enlist interest enough in this subject to lead to the adoption of a stable basis for the naming of diseases by the profession so as to have a common understanding and agreement. He points out some of the many misused phrases or words. He hopes to bring the subject of nomenclature of diseases so prominently before the profession as to induce the next International Medical Congress take the subject in hand and devise a satisfactory international nomenclature. Dr. Gouley puts his facts and suggestions so convincingly before the reader as to make it appear an important matter, and we trust his advice will be heeded.

Editorial.

Medical Society of Virginia—Its Next Session,

In view of the fact that the thirty-two members of the Medical Examining Board of the State of Virginia for the four years' term, beginning January 1st, 1889, have to be nominated by the Medical Society of Virginia so as to let the nominations be in the hands of the Governor for commission, etc., by November 1st, 1888, the Executive Committee of the Medical Society of Virginia, after due consultation with representatives of the Norfolk profession, have determined on 8 P. M., Tuesday, October 23d, 1888, as the

time for convening the Nineteenth Annual Session in the city of Norfolk, Va. Dr. Alex. Tunstall, of that city, has been chosen Chairman of the local Committee of Arrangements.

In this connection we should call the attention of the Fellows of the Society and all others interested to the following very important resolutions adopted during the session of 1887: "Resolved, That a committee be annually appointed by the President which shall be known as the 'Committee on Invitations.' This committee shall invite to attend the sessions of the Society such non-residents as it may see fit; and to this committee must be submitted the names and addresses of all candidates for invitation. Resolved, That this committee's invitation shall carry with it the privilege of participating in the Society's proceedings." Dr. Geo. Ben. Johnston, of Richmond, Va., is the chairman of this committee for this year. Fellows of the Society who have medical friends outside of the State of Virginia that they would wish to be invited to attend the next session should make their wishes known to the committee at as early a day as practicable.

It is proper to add that no part of these resolutions has reference to members of Societies in other States, etc., who may come with credentials as duly appointed Fraternal Delegates. Such Fraternal Delegates are received by the Medical Society of Virginia itself, without the slightest reference to the Committee on Invitations—whose invitations are to be sent to medical men of note who are not known to

be delegates.

We are glad to learn through the office of the Secretary of the Society that, notwithstanding the various occasions for distraction from medical subjects next fall, the prospects for a large and profitable meeting in Norfolk next October are very encouraging. A good number of applications for Fellowship are already in hand.

The Texas Public Health Journal

Is announced to begin issue July, 1888—Dr. J. R. Briggs, of Dallas, editor. It is to be a monthly journal of 32 large pages, devoted exclusively to the science of health. Price \$2 a year. Being the only journal of the kind in the great and progressive State of Texas, with its more than 3,000,000 population, rapidly developing a larger population, remunerative industries and magnificent opportunities, such a journal ought to succeed, especially when we remember that so clever a man is to be its editor.

VIRGINIA MEDICAL MONTHLY.

VOLUME XV-No. 3.

WHOLE NUMBER, 171.

RICHMOND, JUNE, 1888.

Priginal Communications.

ART. I.—Advances in Gynecology.* By THOMAS J. MOORE, M. D., President of the Richmond Medical and Surgical Society, etc., Richmond, Va.

Effects upon Uterus of Lacerations of the Cervix.

Dr. Emil Næggerath at the late meeting of the Society of German Naturalists and Physicians, read a paper containing the following propositions in regard to the effects produced upon the uterus from laceration of the cervix.

1. Women with uterine disease conceive more easily if the cervix is lacerated than if it is in tact. They abort less often in the first condition than in the second.

2- The position of the uterus is not influenced by cervi-

cal laceration.

- 3. The uterine axis is not lengthened by cervical laceration.
- 4. Erosions and ulcerations are equally frequent in lacerated and in intact cervices.

5. Erosions of the lips are never the direct result of cervical laceration.

6. Diseases of the tissues of the cervix are not more frequent in lacerated than in uninjured cervices.

* Read before the Richmond Medical and Surgical Society, May 10th, 1888.

7. Cervical tears have no influence on the development of uterine disease either as to intensity or frequency.

In his concluding remarks he recommends that lacerations and tears be left alone.

Dr. Brook H. Willis replies to him (Journal of Obstetrics, March, 1888). Selecting 400 cases from Dr. Mundé's case book, that had been operated on for lacerated cervix, he demonstrates to his own satisfaction, that the propositions laid down by Dr. Næggerath are untenable, and that lacerations of the cervix are as a rule to be repaired either to cure existing uterine disease or to prevent the development of the same.

The Treatment of Fibroid Tumors of the Uterus

Still occupies the medical mind, and much of late has been written concerning galvanism in the cure of the same. Fibroids when left to themselves rarely prove fatal, but they are ever a source of annoyance and distress to persons burthened with them. After the menopause they, as a rule, cease to grow; sometimes they diminish in size, the patient enjoying comparative comfort during the remainder of life. Hence the efforts of many of our leading gynecologists to bring about the menopause by the removal of the ovaries. It is needless to recall the many advocates of this line of procedure.

Gusserow reports since 1881, 57 cases that have been operated upon in this way (spaying,) including 21 of Hegar's, showing a mortality of ten per cent. Seven unimproved, with 40 much benefited.

Where the fibroid tumor is removed by extirpation Widow estimates the mortality as thirty per cent.—those who survive the operation being permanently cured. He reports 20 cases where the tumors were entirely removed with 11 recoveries and 9 deaths.

Owing to the above facts the tendency of the hour is towards the treatment of these tumors by electricity after the manner of Apostoli. He, up to July, 1887, had made 389 galvano-punctures for the reduction and cure of fibroid tumors. He reports the death of but two of his patients aris-

ing from this method of treatment, and expresses the opinion that these would have been saved with proper antisep-

tic precautions.

Mundé, Cutter, Van-de-Warker and others in America have made rich contributions to the literature of this subject. Apostoli up to a recent date has advocated puncture of the tumors with both electrodes, the observance of strict antisepsis being essential to the success of the operation. He, at the present time, uses but one needle, representing the negative current, and places the positive pole upon the abdominal wall as nearly over the tumor as possible interposing a glazed porcelain terminal so as to offer the requisite resistance to the current.

It is deemed important not to thrust the needle into the tumor more than half an inch. The current should be used gradually at first until the powers of endurance of the patient can be tested, each patient being a law unto herself. The time occupied in passing the current should be from three to fifteen minutes; there should not be more than two sittings per week.

Apostoli uses a current varying from fifty to two-hundred and fifty milliamperes, adapting both current and sittings to the temperament and physical condition of the patient. One must be guarded, where there exists sub-acute peritoneal inflammation, as to the internal use of the negative current, as its tendency is to produce congestion; under other conditions, the negative should be used as the internal current. With treatment by electricity the tumor becomes reduced in size; pain and hæmorrhage cease, and under favorable circumstances the tumor finally disappears; in all cases the patients are greatly improved by treatment.

We must trust to the future for the development of the minutiæ of the laws that are deemed essential for the treatment by electricity of uterine fibroid tumors, with the hope that ultimate exactitude may be finally reached. The field is extensive, the results already attained are brilliant and we feel confident that ere long the majority of these tumors will be made to disappear under intelligently applied electricity.

The Treatment of Extra-Uterine Pregnancy

Has also excited considerable discussion during the past year—Tait and others recommending abdominal section when interference becomes necessary, while a majority of writers prefer the attempt at the destruction of the fœtus by means of electricity. The reported cases of Mr. Tait are in keeping with the brilliant results he has obtained in other dangerous conditions where the abdomen required opening. He makes one statement that should be kept uppermost in the mind—that a diagnosis of tubal pregnancy prior to the rupture of the tube is next to impossible, the rupture being rarely delayed beyond the twelfth week after conception, certainly never as late as the fourteenth week.

To sustain his position he cites 58 cases where rupture had taken place from the 9th to the 12th week. He invariably operates so soon as he has ascertained that rupture of the tube has occurred. He has operated upon 36 women having ruptured tubes with 34 recoveries. Where extrauterine pregnancy has continued to the viable period—that is, to seven months or beyond—he has operated 7 times, with 5 recoveries and 2 deaths. One of the fatal cases he operated upon per vaginam—a method which he declares he will not repeat.

Where he operated by abdominal section he lost but one of the six cases, and he succeeded in saving three of the children. One of these children he has adopted as his son and expresses the hope that in time he will become his professional successor. Another is a bright girl eight years of age. He takes occasion to condemn in the severest terms the use of electricity, for through its means all of these children would have been sacrificed and possibly the mothers, for at this stage if electricity had been resorted to, the patients would have been liable to die with hæmorrhage from ruptured sac, or from peritonitis or septicæmia. The delay of ten weeks after applying electricity, in extra-uterine pregnancy, prior to removing the debris from the pelvis by abdominal section as recommended by those who advocate the use of electricity, he regards as fallacious and dangerous in the extreme. Such delay will almost invariably bring

about one or the other of the above cited unfortunate results.

What to do with the placenta in the viable cases is with him just now sub-judice, with a decided bias in favor of its removal and the stitching of the sac to the abdominal walls so as to prevent its contents from escaping into the abdominal cavity. Where the placenta is lelt behind, it is a matter of greater moment that the sac should be stitched to the abdominal wall and drainage resorted to so as to allow the decomposing placenta to come away piecemeal, as it were.

On the other hand, Mundé, Vander-Warker and others in America recommend the use of electricity so soon as the extra-uterine tumor is discovered. Tait says this is usually done from the ninth to the twelfth week from the time of conception, upon the bursting of the tube in tubal preg-

nancy—rarely, very rarely, if ever before.

The galvanic current is the one generally preferred; the faradic is by some used. The exact strength of either current has not yet been determined. In the use of the galvanic from 12 to 23 cells are generally brought into play. Vander-Warker decidedly prefers galvanism. It is thought best to introduce one pole into the rectum; the other into the vagina as high up as possible in the latter—in this way passing the current directly through the sac. Others place one pole (the positive) over the abdominal wall, the other in the vagina or rectum according to the outline of the tumor. The object is to place the poles in that position which will enable the current to pass through the greatest possible length of the tumos. Lessened tension of the cyst is the strongest indication that the electricity has accomplished its object. After the proper use of electricity, the death of the fœtus being accomplished, laparotomy, if deemed necessary for the removal of the contents of the sac, should be performed in from eight to ten weeks thereafter.

At the meeting of the American Gynæcological Society, New York, Sept. 13th, 1887, the treatment of extra-uterine pregnancy by galvanism was discussed by many of the distinguished gentlemen present. Martin, of Berlin, recommended the immediate removal of a pregnant tube by laparotomy, so did Dr. Janvrin, of New York city. Vander-Warker and Apostoli advocated the use of galvanism.

As the object of this paper is more to chronicle the advances in gynæcology than to advocate the views of any one writer, I will content myself with declaring that there is a stage, when reached during the progress of extra-uterine pregnancy, when it becomes most difficult to determine which plan to adopt—radical removal, or the conservative treatment by electricity. In the commencement of pregnancy, and up to the termination of the third month, the destruction of the fœtus by means of the galvanic current is decidedly indicated; after this period abdominal section would be more truly conservative. When rupture of the sac occurs with decided hæmorrhage abdominal section is indispensable at any stage of gestation. Where the pregnancy has reached the seventh month and the fœtus is living laparotomy is alone to be thought of; it is here that a resort to galvanism would be criminal in the extreme.

The use of electricity in the treatment of disease is becoming more general both in Europe and in this country. The field has been greatly extended, especially in the treatment of the inflammatory and functional disturbances of the uterus and its appendages; endo-metritis, sub-involution, dysmenor-rhea, amenorrhea, metrorrhagia, pelvic cellulitis, etc., are all now being treated with electricity, especially in Germany, and, if the reports are to be credited, with the most flattering results.

When the uterus is bound down by inflammatory bands, or is displaced and kept in unnatural positions, owing either to adhesions, or old inflammatory products, or where its appendages are adherent to it or surrounding tissues, and where any one or more of these conditions is disturbing in a marked degree the nervous system of the party, or in any other way impairing her general health, Schultz recommends combined manipulation through the rectum and over the abdomen until the adhesions are broken up or sufficiently stretched to enable the uterus to be placed in natural position and kept there by a figure of eight, or some other properly shaped pessary. He always administers to his patients

an anæsthetic when subjecting them to the above described manipulations; he endeavors to stretch the parts—not to tear them.

Polk, of New York, recommends in obstinate cases abdominal section, the forcible breaking up of adhesions; and where the uterus is retroflexed, bringing it forward into position and retaining it there, by stitching the fundus to the anterior abdominal wall.

Alexander's operation for relieving retroflexion and retroversion by shortening the round ligaments is maintaining its position as a desirable and satisfactory method of giving relief.

In Germany, the Cæsarean section is growing in popularity while craniotomy is correspondingly declining. Doederlein, Hofmeier and Leebedeff have contributed articles recommending it. The first has recently operated, saving both mother and child. The second reports three successful cases—one a Porro operation; the third two successful cases. They all consider the operation more conservative than craniotomy if performed sufficiently early and with the observance of strict antisepsis. The latter goes so far as to state that he prefers the Cæsarean section, to the delivery of child by forceps, where the latter is possible in a deformed pelvis. It appears to your Reporter that the last declaration will hardly be accepted by the profession at large.

Strauch reports the mortality in Cæsarean section as $11\frac{8}{10}$ per cent. for the mother and 8 per cent. for the children. In 28 cases where premature labor was induced, the mortality of mothers was nothing, while 55 per cent. of the children perished. Owing to the above data, the Germans are disposed to resort to the Cæsarean section in preference to the production of premature labor in those cases where the latter mode of procedure has heretofore been considered as indispensable.

Breuehl reports that in seven cases where the galvanic current was used for the purpose of bringing on premature labor it failed in each case to produce the desired result. He observed that it had a tendency to partially dilate the neck, and therefore advises its early employment in those rare

cases where the neck is so constricted as to prevent the introduction of a bougie. Where the galvanic current is used he says it produces an irritable condition of the uterus that prevents its responding to either oxytocics or mechanical measures. He opposes its use except in the restricted manner above pointed out.

ART. II.—Notes on Sandal Wood of India. By F. S. MASON.

The following information was obtained during a voyage made by the writer on behalf of a large French firm who are manufacturers of a special brand of pure sandal wood oil, known as "Santal Midi," and is the result chiefly of personal observation in the Mysore, Coorg, Madras, and the South Canara districts.

The "santalum album" is found quite abundantly in Southern Madras, and is, with many other trees, carefully protected by the Forest Department; less stringently, however, than in the native state at Mysore, where all trees on public or private land belong to the Maharaja or Prince of the country. This is because the quartzy soil and the altitude of the Mysore plateau, which is pretty generally from 3,000 to 4,000 feet above the level of the sea, are especially suitable for its growth; and the wood from these lands, being from four to five times as valuable, constitutes an important part of the State revenue.

The sandal wood of Madras and Travancore is, for the most part, santalum myrtifolium; and even when the santalum album is grown there, the trees require nearly thirty years each to reach maturity, never yielding a really fine wood, and are chiefly used for the cremation of the poorer Hindoos, although some of the wood is exported to China and Europe.

Sandal wood is cut when the heart is well formed, which requires about twenty years in Mysore; while the sandal found further north (at Poona, for example), although flowering profusely, forms no heart, but remains spongy. The attempts to cultivate it in Ceylon, Singapore, etc., have

given no result; two miserable trees may be seen at the Peridyma Botanical gardens near Kandy, in Ceylon, which, under Dr. Trimen's care, have existed for about ten years, but have made little or no progress towards maturity.

The production of santal in Mysore is the object of some cultivation. When the trees attain maturity, they are cut down at the end of the year, and scraped of their branches. The white wood is easily removed with an axe, leaving the yellow heartwood, which yields the essential oil; this is afterwards classed according to its mercantile value, and each piece (however small) stamped in the native (Canarese) character with the seal of the Maharaja.

The wood in short logs is placed in the various government stores, or "Kotis," and jealously guarded, no one being allowed to enter these buildings without a pass from

the "Dewan*," or his secretary.

The finest pieces are extremely valuable, and are used for cabinet making, while the less regular pieces serve for burning the bodies of Brahmins and other high-caste Hindoos, the chippings and inferior portions being used for distilling the essential oil.

These waste pieces are, of course, more or less exposed to the oxidizing action of the atmosphere, and yield, in consequence, a rank, dark-colored, thick product, which is the kind used for funeral and marriage rites, and as a base of native perfumery.

A part of it finds its way into Europe, and is clarified in Germany, and sold for the best oil, although it is really

very inferior from a medicinal standpoint.

The mode of distillation employed by the natives is worth noting for its primitive character: The refuse chips and small pieces of wood are thrown into a large earthen jar, about two by four feet; this is filled with water, and the mouth of the jar is closed with a cover, and luted with clay. A hole is made in the cover, through which a hollow bamboo tube,† about five and a half feet long, is passed for the escape of the vapor, to which is joined a second. The lower

^{*} The Prime Minister of the State.

[†]The bamboo is sometimes replaced by a copper tube.

end of the bamboo tube is conveyed into a receiver or jar, which is placed in a hole in the ground, in which there is some water. A rag wrapped round the tubes, and a stream of water poured over this by a coolie, serves the purpose of condensation.

Mr. Campbell Warker, the Madras Government Conservator of Forests, assured the writer that some hundred stills, similar in principle, exist in the South Canara and Coorg districts, where much wood is smuggled in from Mysore territory.

Tradition orders that the distillation should be continued for twenty-one days; and seeing how small is the exit connected with the still, it is evident that the oil is re-distilled and oxidyzed to a great extent by this long contact with heated water, before all has passed out from the still into the receiver.

The essential oil of sandal is distilled from the Mysore wood, grown in the forests of the "Hunsur" and Tirtalli districts. The trees are felled especially for our use in the fall of the year, by contract made with this native State, and conveyed without the least delay by coolies and bullock carts from the Government Kotis' over the Western Ghauts to the coast, and from thence shipped to France.

Great importance must be attached to this fact, because wood that lies sometime in the "Kotis" or in Bombay warehouses for shipment, speedily dries, and not only looses a large part of the essential oil, but the oil becomes less limpid and more resinous.

A piece of a freshly-felled tree was cut in two in the presence of the writer, and although at that moment it smelt almost like a fresh rose, in half an hour the perfume had changed to a much less pronounced perfume, although still quite unlike the commercial sandal oil found in the native bazaars.

Bombay imports annually from 700 to 800 tons of sandal wood from the Malabar coast, generally of very inferior quality, and about 12,000 pounds of the oil, which has already undergone more or less sophistication by the native distillers.

When we consider that comparatively poor people often expend as much as R. 50 worth of sandal wood at a cremation, it is evident that the whole 700 or 800 tons is required for the supply of Western India, and that only unsaleable wood is occasionally shipped to Europe; even in the season the writer was unable to find a really good sample of wood at Bombay.

ART. IV.—Treatment of Typhoid Fever, as Adopted in Fifty Cases, with only One Death. By C. C. GREER, M. D., Roanoke, Va.

After the diagnosis has been made beyond a doubt, I order a change of linen and bed-clothes. This change of linen is to be repeated every other day. The bed is to be removed from the wall into the middle of the room. If the disease occurs during the summer, the doors and windows are to be kept open; and if in winter, such ventilation is to be secured as the weather will admit. If the bowels do not move more than twice in twenty-four hours, let them alone. If they move oftener, give a few drops of laudanum with a little bismuth. If the bowels do not move, give injections of warm water. If there is delirium and restlessness at night, give a teaspoonful (or less, if a child) of bromidia every hour until sleep is procured or until four doses are taken. Give the patient as much sweetmilk as you can get him to drink. If there is much prostration, give Liquid Beef Peptonoids such as that prepared by Messrs. Reed & Carnrick, of New York.

With this treatment the temperature will rarely reach 104° F.

Clinical Reports.

Abdominal Section and the Removal of a Mesenteric Tumor, With Recovery. By CORNELIUS KOLLOCK, A. M., M. D., cf Cheraw, S. C.

On the 6th of January, 1888, I was consulted in the case of J. H. G., white, aged 14 years; small for his age; pale and cadaverous in appearance; general health very bad; appetite and digestion much impaired; constipation almost continuous. For the past six months there had been, almost every day, more or less fever of a low type. There was considerable distension in the right umbilical region. The distension was somewhat conical in shape, and seemed to incline to the right side. Fluctuation was very perceptible—

the wave-tap being unusually distinct.

At my first examination of the case the following history was obtained from the parents of the patient and the attending physician: While riding in a heavy wagon, on the 20th of May, 1886, the horses took fright and ran away. The patient, in attempting to get out of the wagon, fell between the wheels, and the hind wheels passed over his body, bruising the skin and muscular tissues of the abdominal walls very severely. According to the statement of the parents and the attending physician, the wheels of the wagon passed obliquely over the body, contusing the parts in the centre and on the side next to the liver more than those on the opposite side. As the wagon was heavy and the horses moving rapidly, the contusion must have been deep, extending to the adjacent viscera. Although there was much suffering at the time of the accident, and great tumefaction and tenderness of the parts for some days afterwards, the patient was not confined to his bed or room for any great length of time, and was walking about in a week. In the course of a month after, all signs of the injury had disappeared, the general health began to fail, and there was very soon evidence of fullness over the region of the parts injured. This continued to increase gradually till I first saw the case, on the 6th of January, 1888, nearly two years after the accident.

As all signs, rational and physical, clearly indicated the presence of a cystic growth, I decided at once upon an operation, that seeming to be the only procedure that promised radical relief. I first introduced a large aspirating needle,

but the fluid was so thick a very small quantity was obtained. The patient now being thoroughly under the influence of chloroform, an incision of three inches in length was made, extending obliquely, from a point near the pyloric orifice of the stomach towards the umbilicus. Being thus enabled to introduce my fingers into the cavity, I learned the size, situation and points of attachment of the tumor.

I am not quite sure that I am correct as to the pathology of this growth. It seemed to be an exudation cyst, composed of double folds of peritoneum, lined with a fluid-secreting membrane. The membrane lining the sac was rough, corrugated and thick, resembling the inner walls of the gizzard of a fowl. Over the tumor lay the omentum which adhered to its surface, and also to the peritoneum; and the folds of the omentum adhered together, so that the tumor was attached to the anterior portion of the peritoneum by the intervention of the adhering omentum. Posteriorly, it was attached by a sort of pedicle, thick, broad and short an inch and a half in length—to the right side of the spinal column, a little above the kidney. This pedicle was made up of a peculiarly organized tissue, filled in with blood-vessels and lymphatics. The trocar was now introduced, and the sac emptied of its contents. The fluid was thick, dark, and greasy looking, with an admixture of pus, and what seemed to be bloody serum. None of the adhesions were very firm; all were easily broken up. Fearing the number and calibre of vessels necessary to the support of this mass would be large, and that extra precautions would have to be exercised to guard against secondary hæmorrhage, I first applied strong clamps to the pedicle before dividing it. The wisdom of this procedure was soon made manifest, for when the pedicle was cut two large arteries presented their open mouths. They were drawn over and ligated separately with strong white-silk ligatures. Not wishing to take the slightest risk of secondary hæmorrhage, the mouths of the vessels were lightly touched by the actual cautery. The cavity being thoroughly cleansed by hot carbolized water, the opening was closed by five silver sutures, secured by perforated shot. The dressing was light and simple, consisting of bats of salicylated cotton and a compress, supported by adhesive strips. The incision treated by first intention, and the sutures were removed by the end of the seventh day. The tumor weighed nine pounds.

The patient made a quick recovery, and is now (four

months since the operation) in the enjoyment of excellent health. Appetite and digestion are good, and the cadaverous look is replaced by a clear and ruddy complexion.

I must think that the injury sustained by the accident was the cause of the tumor, for it made its appearance so soon after the accident and just at the point where the wheels

of the wagon passed over the body of the patient.

There will hardly be a recurrence of this tumor, for there are at this time no indications of anything of the kind. Besides, experience teaches that such growths are rarely, if ever, reproduced. The fact of there being no constitutional feature in the case, and the restoration of perfect health since the removal of the growth, would warrant the most favorable prognosis.

A Case of Hystero-Epilepsy---Tait's Operation---Cure.* By JACOB MAY, M. D., Grand Medical Examiner Order United Friends, etc., Bridgeport, Conn.

Mrs. A., age 31 years; married, two children; had enjoyed fairly good health until she was 19 years old, at which time, during the seventh month of her first pregnancy, was taken suddenly sick (with a "fainting spell," as they called it), lasting nearly two hours. During the time she lost all control of herself and was unconscious of her surroundings. She had several such attacks during the succeeding two months, until delivered at full term. After her confinement these attacks came on at irregular intervals. During the succeeding two years the attacks were followed by more or less pain in the sides, backache, headache, dizziness, and intense pain in the bowels. These symptoms continued with increased frequency until her 22d year, when she again became pregnant; but, without known cause, she aborted about the third month. During this time the attacks were less frequent, but more intense, after the third or fourth menstrual period—always more severe just previous to and during the flow. Number of attacks averaged six to eight a month until her 24th year. Becoming again pregnant, the attacks were quite infrequent and considerably modified. During the cessation of the menses, including the year following the birth of her child, her health very much im-

^{*} Read before the Bridgeport Medical Association, November, 1885.

proved; but three or four months after re-establishment of the monthly flow the attacks again increased in frequency and duration. She was advised by her medical attendant to go into the country, hoping a change of climate would benefit her; but, after two years' residence in the country, she returned with little or no improvement. Scarcely a day now passed by without an attack—more frequent at night, especially following a day of unusual excitement or fatigue. Sexual intercourse, sudden fright, etc., would almost invariably be followed by an attack. These symptoms continued to grow from bad to worse until the summer of 1882, at which time (using her own words), "I lived a terrible life. I was in such a state it seemed I would go crazy. If I saw a person coming to the house it would send such a raving sensation all through me I would often go into a fit."

Such in brief was her history previous to March 20, 1883, when I was hastily summoned at night to see her. I found her in tonic and clonic convulsions, so violent as to require the united strength of several persons to prevent her from injuring herself. There seemed to be complete loss of consciousness; pupils dilated; evelids partly open and eyeballs rolling and staring; frothing at the mouth and grinding of the teeth; pulse full and bounding. She had five or six paroxysms during the two hours, followed by dull, heavy sleep. Her husband told me that that attack was one of unusual severity, but they were obliged to keep a constant watch to prevent her from injuring herself. She would become very fretful and irritable over trifles: would tear out her hair and act like an insane person. Her mind became weaker after each attack, and became very forgetful and extremely nervous. Her physical condition also was far below par. I saw her several times during the following week. Recognizing the character of the attack as epileptic, I put her on anti-epileptic and tonic treatment for four or five weeks with little or no benefit.

Suspecting the epileptic attacks to be due to reflex irritation, I endeavored if possible to ascertain the cause. Physical examination of chest revealed no signs of disease of heart or lungs; kidneys healthy. Pelvic examination showed retroversion of uterus, with slight prolapsus; granular ulceration of cervix; profuse purulent uterine discharge; uterus enlarged; bimanual palpation produced pain upon pressure over ovaries and Fallopian tubes; and nausea and faintness on pressure was continued and persisted in. She complained of dysmenorrhea since her 14th year; pain in

groin, pelvis and back just preceding, during and after flow -pain lasting sometimes two or three days after complete cessation of the flow; menstruation very irregular and always scanty, lasting sometimes only two hours and never exceeding two days. Leucorrhea profuse and constant; often irritability of bladder; continuous feeling of soreness and weight in pelvis; always tired and unfit for work of any kind. Generally has one or more attacks during each period. Before they come on, says she has a strange feeling on the top of her head; a lump gathers in the stomach or bowels and passes up to her throat; then a sensation as though some one grasped her by the throat and shut off her breath; then everything became black to her until she awakened from her sleep following the attack. She had slight cough for several years; appetite poor; bowels constipated; vomiting spells nearly every day; skin dry and sallow; pulse weak; palpitation of heart; easily confused when suddenly addressed, etc. Treatment consisted of general tonics, with good nourishment; copious injections of hot water twice daily; complete rest during menstruation; avoid fatiguing work and excesses of every description; introduced Smith's pessary, and applied appropriate local treatment, as indicated, once or twice weekly.

During the first six months of treatment she would have an attack during each visit; sometimes she would merely faint, but would lose consciousness. Steady and deep pressure over the ovaries during the attacks at times modified but did not entirely relieve them. She would often clinch her hands and press over the ovaries, saying it gave her relief. Continued treatment for one year, with improved gen-

eral health.

Cervix became healthy; pessary gave great relief; uterus still somewhat enlarged. In passing sound, carefully and directly, to the fundus, little pain was produced; but if deflected laterally, in either direction, pain was intense. Ovaries still painful upon pressure; menstruation still irregular and scanty, and always accompanied with pain; discharge of pus continues.

Being now convinced that the pus came from the Fallopian tubes, due to disease of those organs, I advised consultation with Dr. T. Gaillard Thomas, of New York, who, after a thorough examination of the case, wrote me as follows:

"294 FIFTH AVE., NEW YORK, May 2, 1884. "Dear Dr. May: In my opinion, Mrs. A. suffers from hystero-epilepsy, due to ovarian and tubal disease. You have

done all for her which medicine can effect. Now I unhesitatingly recommend Tait's operation. If I can aid you, I am at your service.

"I am sincerely yours, T. Gaillard Thomas."

After considerable difficulty, she finally consented to submit to an operation, and the patient was admitted to the Woman's Hospital, New York city, May 28th, 1884. After preparatory treatment, Tait's operation was performed, June 12th, by Dr. Thomas, by whose kindly invitation I was permitted to witness the operation, and also by whose courtesy I was enabled to make a copy of the Hospital record descriptive of the operation and condition of the patient during the

week following the same:

*June 12,1884.—Removed to Cottage 3. Etherized at 3:30 Dr. Thomas, assisted by Dr. Nicoll and House Staff, made incision in median line dividing tissues down to peritoneum, which was divided on a director. The left ovary was first seized and drawn through the abdominal wound, and the pedicle was ligated and cut off close to the uterus; the right was treated in the same manner. No adhesions being found, the peritoneal cavity was carefully cleansed, the abdominal wound closed with silver sutures, and the usual dressings applied. Pulse before operation, 84; after, Time of operation, 16 minutes. 4 P. M.—Hypodermic of Magendie's solution, min. viij. 4:30 P. M.—Conscious. 5:30 P. M.—Hypodermic of Magendie's solution, min. vj. 9 P. M.—Temp., $100\frac{2}{5}$; pulse, 90; resp., 17. 12, Midnight.— Temp., $100\frac{2}{5}$; pulse, 85; resp., 20. Hypodermic of Magendie's solution, min. vij.

"June 12—7 A. M.—Temp., 101; pulse, 90; resp., 19. 7 P. M.—Temp., 101; pulse, 90; resp., 20. Nourishment—Milk, 3xj; lime water, 3xj; beef tea, 3j. Complained somewhat of nausea; so a mustard plaster was applied and tinct. zingiberis. At 4 P. M., temp. 102; coil was put on; had considerable pain. Hypodermic Magendie's solution, min.x.

June 13.—At 7 A. M., min. v. At 12 midnight, urine $9\frac{1}{2}$ oz.;

night, slight tenderness and distention of abdomen.

"June 14—1 A. M.—Temp., $100\frac{3}{5}$; pulse, 92; resp., 18. 6 A. M.—Temp., $99\frac{4}{5}$; pulse, 86; resp., 17. Nourishment, milk and lime water, $\bar{a}\bar{a}$ 3vij. Hypodermic of Magendie's solution, 9 P. M., min. viij. 2 A. M.—Hypodermic of Magendie's solution, min. viij. Vomited some green fluid. Urine drawn, $\bar{3}iij$.

"June 14—10 A. M.—Temp., $99\frac{3}{5}$; pulse, 80; resp., 17. 7. P. M.—Temp., $99\frac{2}{5}$; pulse, 80; resp., 15. Vomited green

fluid. Urine passed, 5iv. Enema, beef juice, 5jss. Brandy, 5ss every 6 hours. 3 P. M.—Hypodermic of Magendie's solution, min. vj. Night, 12 M.—Temp., 99\frac{3}{5}; pulse, 88; resp., 17. 6 A. M.—Temp., 99\frac{1}{2}; pulse, 80; resp., 17. Two enemata. Hypodermic of Magendie's solution, min. vij at 12 M. Suffers from distension by gas; slight retching and vomiting

during night; urine, 3vij.

"June 15—8 A. M.—Temp., 99\frac{1}{3}; pulse, 70; resp., 20. 6 P. M.—Temp., 100; pulse, 75; resp., 20. Nourishment, toast water, \(\frac{5}{1}\)ij; tinct. ginger, gtt. xxx; tea, \(\frac{5}{3}\)j; brandy, \(\frac{5}{3}\)j; gruel, \(\frac{5}{1}\)iij. Two enemata. Urine, \(\frac{5}{2}\)vij. Coil removed at 11 A.M.; replaced at 1 P. M. Vomited slightly. 10 P. M.—Temp., \(99\frac{3}{5}\); pulse, \(79\); resp., 18. 6 A. M.—Temp., \(99\frac{1}{2}\); pulse, \(80\); resp., 17. Nourishment, tea, \(\frac{5}{1}\)ij; milk and lime water, \(\frac{5}{1}\)ä \(\frac{5}{1}\)ij; Vichy, \(\frac{5}{1}\)iij. Urine, \(\frac{5}{1}\)iv.

"June 16—8 Å. M.—Temp., 99\(\frac{3}{5}\); pulse, 70; resp., 18. Slept nearly all day. Considerable gas escaped per rectum. Urine, \(\frac{5}{2}\)viiss. Nourishment, toast water, \(\frac{5}{1}\)ij; rice water, \(\frac{5}{2}\)viss; carbonic acid water, \(\frac{5}{1}\)ij. Usual enemata. Vomited once. 12 M. (midnight.)—Temp., 99\(\frac{1}{5}\); pulse, 84; resp., 16. 6 P. M.—Temp., 99; pulse, 76; resp., 17. Usual enemata; rice water

and carbonic acid water. Slept nicely.

"June 17.—Highest temp., $99\frac{3}{5}$; pulse, 70; resp., 20. Enema of ol. olive and soap suds, given yesterday, caused a movement of the bowels. Takes plenty of nourishment. Removed to Baldwin Pavilion. Improvement marked, and discharged cured, July 10, 1884.—Said she feels better than she has for years."

In reply to a request Dr. Thomas wrote me the following letter:

"294 FIFTH AVE., NEW YORK, Oct. 26, 1885.
"My Dear Dr. May: You ask me concerning my diagnosis in the case of Mrs. A., upon whom I operated for removal of ovaries on the 12th of June, 1884. I regarded her as suffering from salpingitis and follicular ovaritis, and removed the diseased organs in the hope of at least modifying the epileptic seizures,

which seemed to own as cause the ovarian nisus. I trust "the end has justified the means."

"I am sincerely yours, T. GAILLARD THOMAS."

That "the end has justified the means" can be best answered by the patient herself and in her own words:

"After the operation, the first change I could see was my mind and head seemed so different. I was glad to accept of this change, and in a few days refused morphine, for it seemed a comfort to have my mind clear and at rest. It is now sixteen months since the operation, and I have had no fits and no symptoms of any. I am improving every day, and more able to do for my family than I have been for years past. Up to the present time the state of my health is good. Appetite good; nerves improved greatly; sleep well, and enjoy my family circle."

May 21, 1888.—Nearly four years having elapsed since the operation, with no return of epileptic seizures, and a life of misery being changed to one of comfort, is my apology for reporting this case, which has been of interest to me, and I hope it may prove so to others.

Very Large Child at Birth—Difficult Delivery of Hips, Etc. By R. M. SLAUGHTER, M. D., Theological Seminary, Va.

The very interesting case reported by Dr. Edwards to Richmond Medical and Surgical Society (*Virginia Med. Monthly*, May, 1888), recalls to my mind a somewhat similar case occurring in my experience, and which, in connection

tion with the above, is probably worth reporting.

In August, 1885, my father, Dr. T. T. Slaughter, of Madison county, Va., was engaged to attend Mrs. — in her approaching first labor. She was at that time about twenty-five years of age, and had been married about ten months. She is a small but well developed blonde of about five feet three inches in height. My father finding that, owing to the serious illness of a member of his family, he would not be able to attend this case, suggested that Dr. E. W. Rowe, of Orange, Va., be engaged, which was done.

Dr. Rowe was called on the night of the 24th of August, and upon the following morning, I, being at that time at my father's, was summoned in consultation. This lady, during the latter part of her pregnancy, had been greatly troubled with ædema of the legs and feet. For this condition she failed to have the advice of a physician. At the time of labor, this ædema still existed, and there was, besides ædema of the labia, the right labium being enor-

mously swollen.

At the time of my arrival, the waters had broken, and the os was fairly well dilated. The vertex was presenting, and the head fixed in the superior strait, and not descending at all. The patient being in good condition, we determined to wait awhile, and to give some small doses of ergot and chloral. This being done, and no change taking place in the condition of affairs, though the pains were fairly good both as regards strength and frequency, we saw

that the forceps would have to be used.

Not having this instrument within reach, we determined to send for Dr. C. C. Conway, of Rapidan, to come and bring his. Upon his arrival, the patient having been chloroformed, Dr. Conway applied the forceps without much difficulty, and then came the tug of war. I do not know how long it took us to deliver that head, but I very distinctly remember the amount of physical exertion required to do it, each of us taking our turn with the forceps. It was, I think, during my last turn that the perineum was ruptured, in spite of all care, nearly to the anus, and had it not have torn, I believe the child could never have been extracted. Finally, after much care and labor, we succeeded in delivering the head, and its enormous size clearly revealed to us the cause of our difficulty in so doing.

If we were inclined to congratulate ourselves that our troubles were over, we were vastly mistaken. The shoulders, which were also of enormous size, were only extracted with the greatest difficulty, giving fully as much if not more trouble than the head. The hips, too, required some minutes for their delivery, giving considerable more trouble than the shoulders generally do in an average case. The child, which was a male, was finally delivered dead, and the placenta followed readily. It is greatly to be regretted that, owing to the fact that there were no scales of sufficient capacity available, the child could not be weighed. It was perfectly formed, and of truly enormous size, its length by actual measurement being twenty-seven inches. I am confident that it could not have weighed much, if any, less than from seventeen to eighteen pounds. In this opinion, I am sure, both Drs. Rowe and Conway agree with me.

Owing to the condition of the mother and the edematous condition of the parts, it was not deemed expedient to make

any attempt to repair the injury of the perineum.

For the following four days, I had charge of the patient. She re-acted well, and through the whole period of the puerperium had no symptoms which might not have been expected after such a labor. Antiseptic vaginal hot douches were used for a few days, and afterwards iodoform dressings for the laceration. On the 29th, having to return home, I

left the patient in the care of my father, to whose careful attention the good recovery made by her is in a great measure due.

I saw this lady again in October, of the same year, going prepared to operate upon the perineum, but found it had so completely healed, that I did not deem an operation necessary. When I last heard from her, she was enjoying good health, but had not again conceived.

The points of interest in this case are:

1. The immense size of the child. Could it have been weighed, I believe it would have proven to have been one of the largest on record.

2. That this immense feetus was delivered without muti-

lation, and with so little injury to the mother.

- 3, The great difficulty with which the shoulders and hips, which were not disproportionate to the size of the child, were delivered, and the length of time they delayed the labor.
- 4. And, finally, the ready and complete recovery of the mother.

Gorrespondence.

Last Report of the Medical Examining Board of Virginia. (1) Frequency of Placenta Prævia. (2) Sources of Iodine.

Mr. Editor:—Having been a successful candidate before the Medical Examining Board of Virginia, and having carefully followed the actions of the Board from its formation to the present time, I am pleased to see the beneficial effects it has already had towards elevating the Medical Profession in Virginia, and consequently benefitting the entire population of the State. And I also appreciate the fact that, in time, it may prove a blessing to the whole country, both by exciting other States to adopt a similar system, and also by compelling many of our Medical Colleges to either improve their limited courses and raise their low standards, or else close their doors from shame.

With a great deal of interest, I have just read the Board's last report in the *Virginia Medical Monthly* for May, 1888, and the changes which it proposes will certainly go far towards perfecting the system.

In answering the petition from the students of the Medical College of Virginia, the writer, while ridiculing the work of others, has laid himself open to criticism. To answer sections 8, 9 and 10 of the petition, the writer has made use of some questions and answers selected from the papers of applicants who have been before the Board. In order that these answers might appear more absurd, he has added side notes after each question, and to two of these I wish to take exception.

1. Question. "How would you treat placenta prævia?"
Answer. "I do not know what it is." Note by writer. "It
is a very dangerous and common complication of pregnancy."

2. Question. "What is the source of iodine?"

Answer. "It is dug out of the earth in blocks, like iron."

Note by writer. "It is gotten almost entirely from seaweeds."

I agree perfectly with the writer as to the danger of placenta prævia; but it surprises me very much that he has also found it a *common* complication of pregnancy. Such has not been the experience of this community, nor has it been the experience of our writers on obstetrics.

In a report of 500 consecutive labor cases recently read before the Gynæcological Society of District of Columbia, placenta prævia occurred but once.

Dr. A. F. A. King in his *Manual of Obstetrics* cites it as occurring once in 500 to 1,000 cases. Playfair gives it as occurring about once in 573 cases. Lusk speaks thus of its frequency: "Fortunately, placenta prævia is of rare occurence. Muller by adding together the statistics of various investigators, found reported 813 instances in 876,432 births, or not quite one case in 1,000. Since the opening of the Emergency Hospital in this city, there have been between 1,500 and 1,600 women confined in that institution. So far there has been *no* case of placenta prævia."

When we take into consideration that the average general practitioner does not see more than five or six hundred labor cases in ten years of practice, and that out of this number probably not more than one, or possibly no case of placenta prævia will occur, we can scarcely agree to the

statement as made in the reply signed by the President and Secretary of the Board, that placenta prævia is a common complication of pregnancy.

Again, the writer has opened a field for criticism in stating that iodine is gotten almost entirely from sea-weeds, thus making the candidate's answer appear, not only absolutely incorrect, but at the same time perfectly ridiculous.

On examining the *National Dispensatory* for 1886, page 803, we see that it says, iodine is obtained principally from the ashes of sea-weeds, which is a very different thing from its being *almost entirely* gotten from sea-weeds.

Now, if we cast our eyes down the same page of the *Dispensatory*, we find that iodine occurs in many fresh water plants; also in many vegetables. It is found moreover, in the animal kingdom, as in the sponge, the oyster, etc. It is found, too, in the mineral kingdom, in sea-water in minute quantities, in certain salt springs, in a zinc ore of Silesia, in native nitrate of sodium, and in some kinds of rock salt.

"It is now obtained commercially from one of these sources, viz: From the native sodium nitrate, or Chili saltpetre, with which it occurs as sodium iodate. In 1878, eight chemical factories were extracting the iodine from the mother-liquors left after the nitre crystallization, producing 138 tons (276,000 pounds) of iodine, and three new factories were building, so that the production for 1879 was estimated at 187 tons (374,000 pounds.) An additional factory then building in the Bolivian port Auto Lagesta promised, from the richness in iodine of its raw materials, to put on the market some 98 tons (196,000 pounds) more."

Now taking the National Dispensatory as my authority for stating that about 570,000 pounds of iodine is gotten yearly from the mineral kingdom, I am inclined to think that the candidate should be no more severely criticised for saying iodine is dug out of the earth, than should his criticizer for asserting that iodine is gotten almost entirely from seaweeds.

THOMAS M. NORTON, M. D.

Washington, D. C., May 22nd, 1888.

[While we stand in no way responsible for the notes of the Board to the questions and answers selected by them, it is due them to say that their notes were hurriedly prepared, and were intended simply for the eye of the non-professional legislator. They were designed simply to impress the character of errors of the answers given in by fresh graduates of respectable schools, and, of course, not to mislead any one. Placenta prævia is a sufficiently dangerous and frequent accident to demand that the practitioner should always be on the lookout for it and be prepared to treat it as soon as recognized. And iodine is obtained in large quantity from the ash left from the burning of sea-weeds—never "dug out of the earth in blocks like iron." Our correspondent, however, calls attention to some interesting statistics and facts which are worth remembering, and corrects any erroneous impression that might be left by reading the notes of the Board. Note by Editor.]

Antipyrin for Gonorrhæa and for Dysentery.

Mr. Editor: I have prescribed with good results a four per cent. solution of antipyrin as an injection into the urethra for gonorrhæa. It is antiseptic, antipyretic, a local anodyne, and readily reduces the inflammation and discharge.

I would state also that, from a limited experience, I believe large doses of antipyrin, given in cold-water enemata, twice during the twenty-four hours, and caused to be retained as long as possible in the bowels, are quite beneficial in the treatment of dysentery. It is antiseptic to the bowels, anodyne, antipyretic, astringent and styptic, and will check the sanguino-mucous discharges. I use other plans of treatment per orem pro re nata.

Very truly, D. Lewisdale, S. C., May 17, 1888.

D. M. Crosson, M. D.

Original Translations.

From the French. By R. M. SLAUGHTER, M. D., Theological Seminary, Va.

Some Clinical Facts Relative to the Use of Antipyrin,

Dr. Huchard in a paper before the Societé de Therapeutique (Le Practicien, April 23, 1888) gives the following indications and contra-indications for the employment of antipy-

rin: The use of antipyrin is often successful in migraine and certain facial neuralgias, while on the other hand it is useless ordinarily in cases of intercostal neuralgia and sciatica. It appears to be actually established that antipyrin has the effect of diminishing the quantity of urine, and consequently its use is contra-indicated in certain renal diseases, renal forms of fever, fevers of a typhoid character (la dothiélienterie) in particular. Perhaps it may even augment any existing albuminuria. Antipyrin is often prescribed in angina pectoris; but if it gives good results in relieving the pain in false angina, and the purely neuralgic angina of nervous and hysterical subjects, it is very hurtful in true angina from myocardiac ischæmia resulting from lesions of the coronary arteries. Anginas of this class are relieved by amyl nitrite, and no benefit is obtained from antipyrin; indeed he has seen alarming cardiac weakness produced by it. He has moreover seen two cases of serious cardiac collapse follow the administration of antipyrin in

small doses in broncho-pneumonia.

Dr. Huchard, taking his idea from this diminution of surine caused by antipyrin, has treated polyuria with this remedy. He reported the case of a non-hysterical woman aged 36, who since the age of 18, when she had an attack of typhoid fever, has had symptoms of meningo-myelitis, and suffers from polydipsia and a polyuria to the amount of 24 to 28 litres (quarts) a day. She presents, moreover, a medullary excitability, with spinal pains, pains in the limbs, exaggeration of the reflexes, etc.—in fact all the phenomena appearing to justify the use of antipyrin. The dose of antipyrin was rapidly carried to 6 and 8 grammes (90 and 120 grains) a day. The quantity of urine along with the polyuria diminished to such a point that 8 days after the beginning of the treatment the patient passed no more than 5 litres a day. The antipyrin was then stopped, and though the polyuria partly returned it did not reach its former limits, but remained at from 7 to 10 litres. The remedy did not then effect a complete cure, but there was a great amelioration. This is a unique fact, but it can be approached by the success obtained in the treatment of diabetes by antipyrin in large doses. The antipyrin in this case acted partly by its action on the kidney, partly by its effect on the nervous system, for as is known certain cases of polyuria are due, as has been shown by Leudet, to a meningitis at the base of the brain or even to a spinal meningitis. However, this remedy cannot be useful in all forms

of polyuria. Dr. Huchard has obtained no benefit from it in doses of from 5 to 6 grammes daily in a case of polyuria from renal sclerosis.

Dr. Dujardin-Beaumetz insisted upon the necessity of being assured of the integrity of the kidney before prescribing antipyrin. In two cases of polyuria to the amount of 6 to 7 litres, he had obtained a lessening in quantity to from 1 to 2 litres by the administration of 2 grammes daily. Antifebrin or acetanilide, which is accused of causing serious accidents in subjects with diseased kidneys, does not appear to have as a contra-indication the condition of these organs. It does not seem, in fact, to be eliminated by the urine, for it is impossible to detect it therein. It is probably eliminated by the lungs.

Dr. Paul remarked that to prevent antipyrin from disagreeing with the stomach it should be given with bi-carbo-

nate of soda.

Phenacetine.

At the same meeting Dr. Dujardin-Beaumetz (Le Praticien, April 23, 1888) showed a sample of phenacetine. It is a white crystaline body, more insoluble even than acetanilide. It gives a red coloration with the perchloride of iron, and green with the sulphate of copper. It is an antithermic and an analgesic like antipyrin. In doses of 30 centigrammes (about 4½ grs.) in capsule it produces in fevers a fall of 3 degrees in temperature, which lasts about 6 or 8 hours. As yet no inconvenience has been known to follow its use. It has been used in doses of from 40 to 50 centigrammes. It comes from Germany.

Contagion of Tuberculosis.

Dr. Lamallerée relates (*Le Praticien*, April 2, 1888) the case of a young man who was attacked with bronchitis upon his return from captivity in Prussia, and who married a young vigorous country girl. Eleven months after his marriage this man, who was a wood-cutter, succumbed to tuberculosis, leaving his wife attacked with the same disease. The abundant and specific expectoration of this patient was eaten by a flock of chickens, which thronged around her bed as soon as they heard her coughing. These fowls became tuberculous, and a young neighbor who was free from hereditary antecedents having eaten in four months eleven of them cooked very rare, presented certain signs of tuberculous infections.

There was infection of-1, wife by husband, or woman by

man; 2, of animal by woman; 3, of man by animal.

As a practical hygienic measure, he advises the careful removal of the liver and digestive tube of fowls before their cooking.

Contribution to the Study of Septic Poisoning.

The following are the conclusions of Dr. Kossorotow Wratsch: The microbes of putrefaction when introduced into the blood or tissues of healthy animals do not cause any pathological change. The saline liquid in which the microbes are cultivated changes in its (pharmacological) properties and becomes a true poison.

The deleterious principles appearing in the saline liquid do not resemble in their pharmacological action any of the products of decomposition of the salts, and are in consequence synthetically formed during the cultivation and life

of the microbes for which the liquid forms the soil.

Putrefaction in the air gives rise to the formation in the culture liquids of chemical compounds which have the property of elevating temperature and which are soluble in water and alcohol

When the putrefaction takes place, excluded from the air, there are formed chemical compounds which act principally upon the nervous system. The inoculation of decomposed matter is followed by the appearance of symptoms differing from those of an infectious disease and resembling those of a poisoning.

The active principle of decomposed matter is a chemical compound whose action is proportionate to the quantity introduced, and the weight of the animal experimented upon.

(Bulletin Gén. de Ther.) Le Praticien, April 2, 1888.

Erysipelas and Puerperal Fever.

Dr. Doyen (of Rheims) read a paper before the Académic de Méd. on the 13th of March, 1888, in which he pointed out the following facts: The *streptococcus puerperæ* which is the characteristic microbe of that disease, causes nearly always in rabbits erysipelas and a small abscess; in the woman, sometimes erysipelas, sometimes phlegmons, or purulent pleurisy. The streptococcus of erysipelas nearly always produces in the rabbit erysipelas, and sometimes, too, phlegmons or peritonitis in men.

The streptococcus of pus sometimes causes erysipelas. In his study of the microbes of the vagina, Dr. Doyen has never found the streptococcus. It appears always to be introduced into the uterine cavity by inoculation, as by hands,

instruments, etc.—Le Progrés Med., March 19, 1888.

Antiseptic Treatment of Diphtheria.

After a trial and study of the many remedies recommended in diphtheria, Dr. Le Gendre, Chief of Clinic, Hôpital des Enfants (Archives Laryng., Oct., 1887), advocates the following treatment:

Touch three or four times a day the whole extent of the membrane and a short distance below it with one per cent.

solution of the bichloride of mercury in alcohol.

Every two hours free spray with a warm saturated solution of boric acid (4 per cent.) Internally, give sodium benzoate in quantities of from 45 grains to 3 drachms per day, with claret or champagne and coffee.

This treatment has given excellent results at the Hôpital

des Enfants Malades.

The author insists that caustic applications to the throat are never necessary, and that remedies which might derange the digestive functions should never be given.—Rev. Men. de Laryng. d'Otolog. et de Rhin., April, 1888.

From the German. By M. D. HOGE, JR., M. D., Ric'imond, Va.

Etiology of Tetanus.

Dr. Beumer adds to the reports of cases on this subject (Zeitschr. f. Hygiene, III. 2, Rundschen, March 15, 1888) by Nikolaier, Rosenbach, Hochsinger, and others, the following: A man, aged 30 years, while playing ten-pins, drove a splinter one-half inch long under the nail of the right middle finger. Immediately after the occurrence the patient fainted, and after recovery vomited. He then, as he believed, removed the splinter. During the next seven days he felt very well, with the exception of slight pain in the wounded finger. On the eighth day he was seized with tetanus, and died three days later.

According to the views held at present in regard to the origin of tetanus, the next most natural thing was to examine the wood of this Alley. Beumer took a small splinter of this wood from near the place where the man was injured, and inoculated several animals with it, whereupon almost all of them died of tetanus. The wood itself was in no way the cause of the disease; and to prove this, Beumer with a knife scraped away the dust and dirt from the surface until he reached the clean surface underneath. He then inoculated animals with this dust, which all gave a positive result, whereas the splinters of the clean wood

gave only negative results. Beumer thinks the proof is positive that the tetanus bacillus, with dust and dirt, was dried on the splinter, and that it caused the death of the man, and the statement of Rosenbach is correct—namely, that tetanus in man and animals is identical.

Beumer soon had a wished-for opportunity to examine and experiment with the navel-string of a new-born child who died of tetanus. He cut out a part of the peritoneum along with the cord, and was enabled to find the tetanus bacillus in abundance. With this secretion he inoculated several animals, which all died with the characteristic symptoms. He thinks consequently that the facts point to the infectious nature of the disease. But the question arises, How did the tetanus bacillus reach the navel wound? The only answer is, through the hands of the midwife, or the material used to tie the cord. And since the personal observation of strict antisepsis, he has had no further cases of tetanus neonatorum. The reason that most infants do not die of the disease is that Beumer has found that the more pronounced the granulating of the navel is, the more difficulty there is of inoculation.

Atropin in Opium Poisoning.

Semtschenko (Jahrb. f. Kinderheilk. XXVI, 4, Rundschau, March 15, 1888) was called to see a child, 8 months old, who had been given one drachm of Dover's powders through mistake. He tried the usual remedies, such as vomiting, laxatives, rectal injections of coffee, mustard plasters, cold water douches, etc., without effect. Five hours after the poisoning he administered a solution of atropin (gr.j to 3ij water), one drop every hour, in all four drops in three hours. After the first dose, the respiration rose from nine to twenty-one per minute, the contracted pupils widened, and the pulse became again perceptible, 127 per minute. Eight hours later the little patient was entirely relieved, and in the course of the next day made a complete recovery.

Diuretic Effect of Digitalis.

Prof. R. Robert, of Dorpat (Therapt. Gazette, June, 1887, Rundschau, March 15, 1888) has lately been experimenting in regard to the diuretic effect of digitalis, and the three new subtances named by Schmildeberg digitalin, digitaxin, and digitalein. The two last named have the power of dilating the blood-vessels, and therein lies the diuretic property. In regard to the best form of digitalis to employ, the author thinks the full effect of digitalin, digitoxin and digitalein is best obtained by the tincture of digitalis, because these

substances are soluble in alcohol, whereas in infusion they are less soluble.

Treatment of Spondylitis.

According to Dr. A. Nota (Schmidt's Jahrb., 1888, 2, Rundschau, March 15, 1888), the treatment of spondylitis by means of Sayre's plaster corset has the disadvantages that it immobilizes the entire thorax, as also the interthoracic organs, thereby hindering them in their proper functions and development. Further dangers from this mode of corseting are time and difficulty of putting on and taking off the jacket, weight of the bandages, decubitus on the prominent projecting bones, etc. Nota has constructed an apparatus by which it is hoped some of these disadvantages may be overcome. A horizontal steel rod runs across the back at the height of the spine of the scapula, ending in stirrups fitting in the axilla, which draw the shoulders back in a direct manner. From the horizontal rod two steel rods or supports run down parallel to the spinal column, and are fastened to a hip girdle. Between the two perpendicular rods a strong elastic band is fastened by means of straps and buckles, which can be fastened higher or lower at will. The apparatus hinders in no way the movements of the chest or extremities, and is light, cheap, and durable. experience with Sayre's plaster-jacket has demonstrated that the objections urged against it are theoretical and presumptive, and that, if properly applied, the patient suffers so little inconvenience as not to demand anything better.—Editor.

Two Cases of Open Urachus in Adults.

Dr. Bramann reports (Archiv. f. Klin. Chirurg. XXXVI, 4, Rundschau, March 15, 1888) two such cases, which were recently operated upon by von Bergmann, in Berlin. The first case was that of a girl 12 years old, who three years before had a sudden flow of urine from the navel. The operation consisted in removing the dark-red covering of entrance of the urhacus down to the bladder. The wound was sutured at the superior part, tamponed with iodoform at the lower part, and a catheter was left in the bladder. The wound healed well, with the exception of an obstinate fistula at the lower end behind the symphysis. The cause of the trouble was cystitis. By the repeated spasmodic contractions of the urethra, the urine was gradually driven into the urachus, which dilated it. The second case was that of a lady 63 years old. About eighteen years ago she had a severe attack of inflammation of the womb. The surgeon

at the time diagnosed a tumor in the region of the navel as large as a man's fist. It gradually advanced towards the symphysis. Two years later it discharged at the navel a quantity of foul-smelling pus. Since that time it has continued to discharge through the fistula. Von Bergmann gave as a probable diagnosis the permeability of the urachus caused by concretions. The operation verified this opinion: the concretions were gall stones. The result of the operation was good.

[The urachus which forms in the early feetal state, a tubular communication between the urinary bladder and the allantonic vesicle, preserves, according to Luschka, vestiges of its original condition in the form of a long interrupted cavity, with irregularities and dilatations lined with epithelium similar to that of the bladder, and sometimes communicating by a fine opening with the vesical cavity.

Quam's Anatomy, Ninth Edit., p. 663.]

VIRGINIA STATE PHARMACEUTICAL ASSOCIATION.

The annual meeting of the Virginia Pharmaceutical Association convened in Masonic Hall, Danville, Va., on Tuesday, May the 8th, 1888. The meeting was called to order at 3 P. M., by the President, Mr. Robert Brydon, and opened with prayer by the Rev. Alexander Martin, of the Presbyterian Church. Mr. W. T. Harris, of Danville, made a very appropriate address of welcome, and was replied to by Mr. T. Roberts Baker, of Richmond, on behalf of the visiting pharmacists.

The President then read his annual address, making in it some valuable suggestions, the consideration of which was

referred to a committee.

A resolution was introduced, and passed, inviting the physicians of the city of Danville to seats in the convention, and a participation in the debates. Some of the physicians not only availed themselves of the privileges extended to them, but did more.

For instance, Dr. W. L. Robinson, of Danville, read a very forcible and interesting paper, on "The Abuse of Opium," which led to a very profitable discussion of the subject, developing facts to show that both the physicians and the

pharmacists neglected many precautions which would tend

to prevent the abuse of the drug.

On the second day Dr. B. M. Walker, of Danville, read a paper, on "The Sile of Patent Medicines." This paper strongly condemned patent medicines, and proposed to rid the public of them by probibitory legislation. This was a "very good song, and very well sung," but the plan recommended is altogether impracticable, and was so decided in the discussions which ensued on the subject.

The reports of the Treasurer, Mr. F. H. Masi, of Norfolk, and of the Secretary, Mr. C. B. Fleet, of Lynchburg, showed

that the Association was in a healthy condition.

Resolutions of respect to the memory of the late Benj. F. Ladd, of Richmond, and F. Dun, of Portsmouth—two members of the Association who had died since the last meet-

ing—were passed and put on record.

A number of interesting and instructive papers were read in answer to queries. One by Mr. J. W. Thomas, Jr., of Norfolk—Title: "Statistics Regarding the Manufacture of Peanut and Cotton Seed Oil in the United States; How Much is Exported; and is Any or Either of these Oils traceable in the Adulteration of other Oils."

A paper contributed by Prof. F. P. Dunnington, University of Va.—Title: "Oxidation of Sulphurous Acid, and other

Sulphites."

By T. F. Knock, of Petersburg—Title: "Hydronapthol." By A. W. Jacob, of Danville—Title: "Best Method of Pre-

serving Essential Oils, Lemon and Orange."

By T. Ashley Miller, of Richmond—Title: On the Blue Deposit, and Unpleasant Odor Developed in Simple Syrup which has been Prepared by Cold Displacement, on standing a Long Time."

By C. A. Santos, of Norfolk—Title: "Unofficinal Formulary

of the American Pharmaceutical Association.

The report of the delegation appointed to attend the last annual meeting of the American Pharmaceutical Association, held in September, 1887, in Cincinnati, was read by

T. Roberts Baker, chairman of the delegation.

Both the citizens and the resident Pharmacists of Danville were profuse in their hospitalities, and the Association after thanking them adjourned to meet on the third Tuesday in June, 1888, at the Hygeia Hotel, Old Point, Va.

RICHMOND MEDICAL AND SURGICAL SOCIETY.

[Accidentally omitted in May number, from Report for April 26th.]

Supra-Pubic Lithotomy—Two Calculi Removed—Nuclei being Pieces of Gum Catheter.

Dr. R. B. Stover presented two calculi, 3 inch in diameter by 2½ inches long, with a piece of gum catheter as a nucleus in each, which he removed from the bladder of an ataxic man by the supra-pubic operation. He first saw the patient, in consultation with Dr. Wm. B. Gray, on the 12th of April, when, on sounding, stone in the bladder was diagnosed. The patient said, some twelve months before, when using a gum catheter, which he had been in the habit of using for a long time, that, on withdrawing it, he found a piece broken off, but that he was not certain if it was broken before introducing it or not. The patient had been the subject of locomotor ataxia for about seven or eight years; and since the accident with the catheter, just related, he had not been able to walk—in fact had lost the power of locomotion; and, on account of constant pain in the bladder, he had to use mor-· phia so persistently that he had become a confirmed opium subject, taking in 24 hours from 10 to 20 grains of sulphate morphia hypodermically in the form of Magendie's solution. Knowing that the probabilities were that the stone held as a nucleus a foreign substance that could not be crushed with the lithotrite, and that the only hope of relief was in its removal, notwithstanding his desperately poor condition for operation, the Doctors decided that, if the patient and his friends so elected, they would give him the chance, which they thought the only hope of any relief in his case. After explaining to him most carefully what they believed to be his chances for recovery, even telling him that they thought it doubtful if he would live through the operation. he and his friends, after several days' reflection, told them they had decided in favor of the operation, and that they wanted it done as soon as possible. The patient said if he died he would prefer it to going on suffering like he had been and was still doing. Accordingly the operation was done in the usual manner, taking all antiseptic precautions. Drainage was established by a tube through the urethra. One stich was taken in the upper angle of the wound. The peritoneal coat was not opened, nor was there any extravasation of urine. The patient rallied and seemed in fair condition for 24 hours; then he began sinking, and soon died.

The only evidence of peritonitis was some little tympanites, but no tenderness or other signs of inflammatory action anywhere.

May 10th. Syphilis-How Communicated, etc.

Dr. Hugh M. Taylor reported a case of syphilis which he thought opened up for discussion several of the many obscure points met with in the study and treatment of that disease. Several weeks ago a young gentleman informed him that he had been married four months, that his wife was pregnant three months, that three years ago he had had chancre bubo, eruption, followed by sores in his mouth, and a year or more after the initial lesions gummata (which ulcerated) appeared over the frontal bone. The scars of this last effect were still very well marked, and looked as if they might have resulted from a sore as large as a half dollar. For five or six months after the primary trouble disappeared he was under constitutional treatment; then he suspended treatment, and did not resume it for six or eight months, at which time the ulcerated gummata appeared. He continued constitutional treatment until the gummata healed and for several months afterwards. For the past eighteen months he has appreciated no additional complication, and was pronounced by his physician well enough to marry. Accordingly four months ago he had married a little country girl just sixteen years old. She had never been sick in her life. Even since her pregnancy, would not have known that she was so, but for the cessation of menstruation. He now feared she had syphilis. For four or five days she had experienced a burning, smarting sensation between the labia, and it increased until she was obliged to speak of it. Her husband examined the sores, and having had chancre himself was at once struck with their chancre-like appearance, and very promptly insisted upon the advice of a physician. The husband seemed fully to appreciate his responsibility and his remorse was deep and honest, and he knew well the importance of throwing all possible light upon the case.

On examination, Dr. Taylor found sores, the specific nature of which he would not have questioned for one moment if seen upon the penis of a man, or the organs of an unchaste woman. They were distinct, limited, clear-cut, gouged-out ulcers, with a grayish floor and slightly indurated base. There were four of them, and their multiplicity furnishes one of the interesting points of the case. One

was on the mucous membrane of the right labium, one under the pubic arch near the meatus, and two on the cervix uteri. Did the multiple sore all of a like character preclude. the idea that the case was one of primary syphilis? Did the absence of appreciable lesions on the husband after eighteen months render it improbable that he could transfer syphilitic virus and produce primary syphilitic sores? If it is possible for him to inoculate, how is the inoculation brought about? Is it through the spermatic, prostatic, or other urethral discharge, from the contents of a mucous follicle, from a cut or an abrasion on the glans penis? A third question is, how long after the disappearance of the primary, secondary and tertiary lesions must we wait before sanctioning marital relations? These are important questions which physicians are called upon to solve very often, and it was only after witnessing the remorse on the part of the husband and the horrible consequences to an innocent wife and offspring that we appreciated fully the responsibility in such a case as he reported.

In regard to the multiplicity of the sores he thought those syphilographers were right who contended that the poison of chancre was auto-inoculable until the system is thoroughly saturated with the poison. He thought the analogy between the syphilitic and vaccine poison was conclusive. In primary vaccination we could have as many pustules as points of inoculation, and the common occurrence of multiple chancres of the nipple was even more conclusive of the possibility of the occasional existence of multiple chancre in primary syphilis. If it was possible for a cut or an abrasion on the penis to contaminate one abrasion on the genitals of the female, he could not see why several abrasions might not be simultaneously contaminated, and consequently the simultaneous development of several chancres, and he did not think it far-fetched to suppose that we may have several abraded points from frequent sexual indulgence in a sixteen year old girl. He was inclined to the belief that an unnoticed abrasion or cut on the penis of the husband in this case had inoculated several abraded points on the wife.

In regard to the possibility of inoculation of the mother through the fœtus, and the presumption that the genital sores noticed by him were mucous patches, he was not prepared to discuss, but in view of the fact that syphilographers have to a great extent agreed that the normal physiological secretions, such as blood, the spermatic, prostatic and sali-

vary fluids are not auto-inoculable, he inclined to the belief that the mother contaminated the fœtus and not the fœtus the mother.

He thought he was not over-zealous in his protective policy in prohibiting marriage for three years after the disappearance of all appreciable specific lesions, and he was more and more inclined to credit immunity at that date to the eliminative power of nature, rather than the curative virtue of any drug. His experience in aborting and preventing the lesions of secondary syphilis had not been satisfactory. He had under treatment now a patient who had had disfiguring eruption of secondary syphilis since October, and this condition had continued in spite of tonic doses of bichloride of mercury begun upon the first appearance of the primary disease.

Case of Syphilis with Peculiar Complications.

Dr. Jacob Michaux reported the case of Mr. B., æt. 42, who contracted syphilis in October last, his case presenting the characteristic initial chancre near the frænum. In about one month this sore healed under the usual treatment. About this time a chancroid appeared on the dorsum, under the prepuce just behind the corona. This sore gave no great trouble for two or three months, during which the secondary symptoms developed fully. About this time it became phagadenic, and slowly went down to the meatus and involved the prepuce. Various local remedies were used along with the constitutional mercurial treatment, and after great difficulty and much time it began to granulate and heal, and is now nearly well. About the time of the greatest activity of the secondary symptoms, and when fully under the influence of mercury, an attack of acute articular rheumatism supervened with great violence in the right knee-joint. Salicylate of soda controlled it, and in about ten days the patient was able to walk. Was this mercurial rheumatism? He does not think it was, from the fact that it yielded so promptly to the remedy and presented all the symptoms of acute articular rheumatism.

For Rheumatic Neuralgia.

Analyses, Selections, etq.

[Prepared by M. D. HOGE, Jr., M. D., Richmond, Va.]

Eczema.

After a short introduction in answer to the questions in regard to young doctors becoming specialists, Dr. John A. Larrabee, Louisville, Ky., (Progress, April, 1888,) asks, What is eczema? A catarrh of the skin. This term implies a close relationship between the outer covering and internal lining of our bodies. It is a disease of irritation—an accumulation of cells in the papillæ of the skin. It is quite commonly believed that eczema is in some way connected with the constitutional diseases—scrofula, syphilis, etc. This is a great mistake, as there are no causal connections with them. The infant subject to eczema, if not over treated, gets well perfectly. The scabs fall off, and the horrid crusts, which seem to act the part of a coating of manure to the scalp, leaves the hair and the skin most beautiful. The enlargement of the cervical and other small glands about the ear and scalp are only the result of over-taxation in the struggle to carry off the débris. The digestion is frequently better than in other children, and such children more often escape catarrhs and internal diseases. The sudden suppression of eczema is by no means free from danger. The number of such cases killed is large. The sun's rays, cuterigo. accumulations of filth, wearing irritating clothing, and the use of soap may be developing causes of eczema. External applications should be bland and soothing and sedative starch poultices for the one and olive oil and carbolic acid for the other—their main action being to allay itching. A mixture of cold cream and oxide of zinc and resorcin is better. The compound talcum powder is also a good application, especially in fat children. Soap and water must not be used. Always begin internal treatment with 1-10th gr. triturates of calomel several times daily. Keep up the dose for several days to improve the secretions. Follow this by the best tonic we possess, the F. F. V.: fresh air, Fowler's solution, and vinum ferri.

Malarial Hæmaturia.

Dr. R. M. Brown, Farmers' Branch, Texas, says (Texas Cour. Rec. Med., April, 1888) that about 50 per cent. of this

disease proves fatal. It prevails chiefly in the fall months and in miasmatic districts in the South Atlantic States. The fever attacks only those persons who have been long exposed to malarial miasm. It is usually ushered in by a chill, great depression, pain in the lumbar region and groin; then a sudden jaundice, a copious flow of dark-colored urine, vomiting of thick, greenish, dark brown or blackish water. Often great thirst and hiccough—the latter a grave symptom. Slight tenderness over the epigastric and hypochondrise regions. Palpation and percussion reveal an enlarged spleen and liver. The temperature often rises as high as 105.50°. In many cases the patient appears almost convalescent between the paroxysms of ordinary intermittent. In severe and fatal cases the secretion of urine grows less with each succeeding paroxysm, until there is complete suppression, followed by all the symptoms of uramic poisoning. The renal hamorrhage is explained by the toxic effect of the malarial poison in the blood, causing functional failure in the liver and spleen; these become engorged, and the products they should eliminate either remain in the blood or are reabsorbed, the excretion of which devolves upon the kidneys. These organs become congested, the capillaries become distended, their walls give way, and hæmorrhage ensues. The only diseases with which it may be confounded are acute atrophy of the liver and yellow fever. Dr. Brown begins his treatment with an emetic; if constipation exists, 20 grains of calomel, followed in six hours by epsom salts; if there is diarrhea, tincture of opium, 8 to 10 drops, or paregoric. A few drops of laudanum is all that is needed to control the vomiting. As soon as these symptoms are subdued, then quinine is resorted to, given freely in 40-grain doses, and maintain the impression for two days. In conjunction with the quinine, diluent diuretics should be administered. Uva ursi, pipsissewa, spts. nit. eth. and digitalis are the most efficient. Warm alkaline baths promote the action of the skin and allay thirst. As tonics, iron and mineral acids are indicated in the early stages. Iced drinks of pure Apollinaris water, champagne, brandy and milk are allowed ad libitum. Strong, nutritious, easily digested foods complete the cure.

Fracture of Femur-New Appliance.

Dr. F. H. Schmitt, Schulenburg, Texas, (Cour. Rec. Med., April, 1888,) has made a combination of Buck's extension apparatus with Esmarch's double inclined plane. After the

fractured leg has been placed on a double inclined plane, the femoral portion of which is deeply hollowed and well cushioned, hinged at the knee, leaving the popliteal space free from pressure and resting on a board, the lower portion of which is grooved so as to admit of the angle being changed, the upper part of the femoral splint should be short enough to allow the buttocks to rest on the mattress. A strip of adhesive plaster, four inches wide and long enough to reach from the fracture, is carried from one side of the leg loosely around the patella and back to the point opposite the beginning, the same as in Buck's apparatus, with the difference that here the plaster is carried along the sides of the leg to below the sole of the foot. Around the knee a hole is made in the plaster to diminish the pressures. A roller bandage is now applied from the toes up, including short splints on the back and sides of the thigh. A cord is attached at the knee and directed over a pulley at the foot of the bed, high enough to be on a line of axis with the inclined femur. A weight is attached to the free end, which holds the leg steady. This combination method is of particular value in oblique comminuted or compound fractures.

Laparotomy.

Dr. A. M. Curtis, Waco, Texas, reports a case (Cour. Rec. Med., April, 1888). The usual incision was made from the symphysis, but, on account of the extensive adhesion of the multilocular ovarian cyst, the first incision had to be lengthened. The bands were ligated with catgut, the broad ligaments and Fallopian tubes with silk, and dropped back into the abdominal cavity. The peritoneum was closed by Chrouni's catgut continuous suture. The wound was dressed antiseptically, and the patient made a rapid recovery.

Management and Treatment of the Insane in Texas.

Dr. A. N. Denton, Austin, Texas, after giving a short historical sketch of asylums (Daniel's Tex. Med. Jour., April, 1888), commences the discussion of the subject by referring first to mechanical restraint, which should only be used to prevent self-injury or suicide, serious bodily injury to others, and to prevent removal of dressings of wounds. The greatest liberty should be allowed consistent with the safety of the patient. Means should be employed for recreation and occupation. No man should ever be permitted to assume control and care of the insane who has not complete control at all times over his own passions and impulses. It requires

at least a year's experience in large asylums for an industrious superintendent to learn the names of the inmates, the physical and mental peculiarities of the patients. Changes, for this reason, should never be made except for good and sufficient reasons. It seems that the Texas asylum has been made to serve the end of political reward. For the thirty years since the asylum has been erected there have been no less than fifteen separate and distinct managements of its affairs, and under each administration a new medical superintendent has been appointed.

Morning Sickness.

Dr. James D. Boyce, Dallas, Texas, says (Cour. Rec. Med., April, 1888): The agent giving the best results has been chloral hydrate used as follows: Chlor. hyd. grs. xxv, mucil. acac. 3j. Taking a Davidson syringe, it is filled with this solution and injected against the os uteri, always being done after retiring at night, and repeated the same hour thereafter, enjoining the dorsal position for some time in order to keep the application at the supposed source of irritation.

Expediency in Diagnosis and Treatment.

Dr. Henry Fraser Campbell, of Augusta, Ga., in discussing the momentus case of Frederick, Emperor of Germany, in the Journal of the American Medical Association, June 2, 1888, remarks that "cancer is incurable; scrofula in such advanced condition is also incurable; syphilis, even in its most deplorable advance, is amenable to treatment, and complete restoration possible. Then why not let expediency guide the treatment?" He thus explains his meaning of the term "expediency in diagnosis." He reports the case of a man, æt. 30, who was greatly emaciated, and not taking sufficient food because of pain during deglutition. Aphonia was complete. Never had cutaneous eruption; digestive functions intact, etc. But his sleep was often interfered with by irritative cough and purulent expectoration, and had dyspnæic attacks which were becoming more frequent and alarming. Pharvnx was red and tumid with prominent and enlarged follicles, with here and there superficial gravish ulcerations. No enlargement of submaxillary or other cervical glands. Tonics, cod-liver oil, nourishing diet, astringent and alterative gargles had been used—the affected surface being brushed over with a mild solution of mercury bichloride. Cancer of the throat had been diagnosed. No history of syphilis could be traced. It was evident that while the diagnosis could not be made out clearly as cancer, scrofula or syphilis, still if either cancer or scrofula the patient would die in a few months. Hence he determined to give the patient the benefit of the doubt, and prescribe for the curable disease—syphilis. Therefore he prescribed:

R Ferri et potassæ tart.......3vj Syrupi.....5viij—Mix.

S.: Take one or two teaspoonfuls from each vial three times a day in half a glass of water, before or after meals. Take through a glass tube to avoid staining the teeth.

M.—S.: Use as a gargle frequently during the day. A mild mercurial course was advised to be combined later on—or "the mixed treatment" for constitutional syphilis. Ricord long ago said that tartrate of iron and potash was the sworn enemy of phagedena. Dr. Campbell has for thirty years found it the sworn enemy of the suppurative process as well, under certain conditions. And hence he has seldom prescribed iodide of potassium in certain forms of constitutional syphilis without combining it with this

particular form of the ferric salts.

The patient was better in twenty days—in fact, the improvement was marvellous in every respect. The ulcerations of the fauces had greatly diminished, and had assumed a more healthy appearance, and the prominent tumid follicles had regained their normal appearance. Modifications of the treatment begun were continued for some weeks or months. Ten years after the treatment the man was seen again and was well, nor had there been any return of the trouble. This case and many others that frequently come under the eye of the physician furnishes good illustrations of using "expediency" in diagnosis and in therapeutics—a principle which might well guide the attendants of the afflicted Emperor.

Syphilis—Limit of Period of Communication by Contagion or Inheritance, Etc.

Not having space in which to make report of the proceedings of the late session of the American Medical Association, we will content ourselves with a few excerpts.

The following discussion (taken from *Medical Record*, May 26th), bearing on the subject of a report by Drs. Hugh M. Taylor and Jacob Michaux, in the Department of this issue given to the Proceedings of the Richmond Medical and Sur-

gical Society, will prove of interest:

Dr. L. B. Bangs, of New York, had sent a letter in which he concluded, from a study of a number of cases collected by Fourrier, that (1) the so-called tertiary lesions of syphilis are not contagious; (2) the contagious period of syphilis may disappear spontaneously; and (3) the extreme limit of the contagiousness of the disease may be put at five years. He cited several authorities who were inclined to put the limit of contagion at a much earlier period than this. Another argument in support of this view was that derived from reinfection. A person who is capable of contracting the disease a second time may reasonably be supposed to be so far cured as to be unable to communicate syphilis to another. The writer instanced eleven such cases, the average period at which the reinfection occurred being about five years after the beginning of the first attack.

Dr. Keller reported a case which had come under his own observation. A man married within a few months after having contracted syphilis, and had mucous patches in the mouth some time later. The wife remained perfectly well during her pregnancy, but the child had sniffles immediately after birth, and soon presented a skin eruption. Ten days after its birth, the mother presented a well-marked macular eruption over the entire body. The children born

subsequently showed no evidences of syphilis.

Dr. Palmer, of St. Louis, did not think that any definite time could be set as the limit of the contagiousness of syphilis.

Double Chancre a Distance.

Dr. Ohmann Dumesnil, of St. Louis, reported two cases, in each of which there were two well-marked hard chancres, one on the prepuce and the other on the lip. Both patients suffered from cracks in the lips. He did not regard the cases as examples of auto-inoculation, but believed that the two chancres had been acquired at the same time, since they were apparently of the same age, the induration and glandular enlargement appearing and disappearing simultaneously.

The speaker then reviewed the evidence for and against the possibility of auto-inoculation of syphilis, closing his re-

view with the following conclusions:

1. The probability of auto-inoculation in early syphilis has not been demonstrated.

2. While there may be strong presumptive evidence in

favor of it, it is only at best a possibility.

3. The most crucial experiments prove that excision of the chancre, at the earliest possible moment, is futile, and falls short of its purpose.

4. In multiple chancres à distance the lesions are due to

the same inoculation, as a rule.

5. In multiple chancres of different ages, it is probable that the younger lesions are merely irritative scleroses.

6. Experiments, so far, apparently prove that syphilis is constitutional at the time the initial scleroses makes its appearance.

Dr. Palmer, of Louisville, did not believe that syphilis was auto-inoculable, and thought that excision of the chancre

was useless as a therapeutic measure.

Dr. Ravogli had seen two cases in which there was a double chancre of the penis, one on each side. He saw no valid argument against the auto-inoculability of syphilis, and he believed that early excision of the indurated chancre would, in many cases at least, prevent a generalization of syphilis. He had performed excision in six cases, and in no instance did the patients present any further manifestations of syphilis, although no other treatment was resorted to. The operation was very simple, and was well worth trying in the light of the results which he had obtained. Care should, of course, be taken to remove thoroughly all the indurated tissue.

Dr. Zeissler, of Chicago, did not believe that excision would prevent syphilis, and those cases in which it had seemingly done so were to be explained by the fact that the constitutional disease did not always follow the appearance of a hard chancre. He had seen a number of such cases, and had also met with others in which the disease followed a chancre without any induration.

Dr. Keller, of Hot Springs, believed in the value of excision, but to be effectual, it must be practised within forty-

eight hours after the appearance of the lesion.

Dr. Reynolds had no faith in excision, for he did not look upon the evidence alleged in its favor as at all conclusive.

Dr. Palmer thought excision was of sufficient value to at least warrant its execution. He did not think it would cure the syphilis, when once induration had taken place, but he believed that it would lesson the severity of the subsequent symptoms. Dr. Ohmann Dumesnil said that the mere fact that no secondary symptoms were noted after excision of the chancre proved nothing, for often the secondary manifestations of

syphilis were so slight as to escape notice.

Dr. Joseph Zeissler, of Chicago, then read a paper on the importance of the local treatment of syphilis, which he thought was often underestimated. He had found mercurial plaster useful in promoting the disappearance of the induration. For the roseola he used white precipitate ointment, of a strength of from ten to twenty per cent. Chrysarobin had been recommended for the cure of the papular syphilide of the palms and soles, and for the moist condylomata he had found nothing better than the solid nitrate of silver. The best results of local treatment are seen in the later manifestations.

Dr. Shoemaker, of Philadelphia, was partial to hot baths of water, steam or air. He had found chromic acid very useful as an application to the mucous lesions.

Dr. Ohmann Dumesnil had obtained excellent results from the use of nitric acid in the treatment of syphilitic lesions of the anus and vulva.

Diagnosis and Treatment of Disease of the Stomach.

Dr. William Pepper, of Philadelphia, opened the discussion in the Section on Practical Medicine, etc., of the American Medical Association, May 9th, (as reported in *Medical Record*, May 26th), with some practical remarks on diagnosis of diseases of the stomach. To illustrate his points he cited a number of cases:

Case I.—A man had been losing two pounds in weight per week for a period of sixteen weeks. No disease could be detected. Blood and urine normal. No affection of heart and lungs. No enlargement of the spleen or glands. Inspection of the fundus of the eye presented no data of significance. No pain, vomiting, or constipation. had failed and hence mastication was imperfect. Careful diet, with small doses of arsenic, brought about a temporary improvement, but emaciation in time resumed its progress. Only by a process of exclusion did the speaker arrive at a diagnosis of developing cancer in the walls of The case resulted fatally three or four months after it was first observed by the speaker, and the walls of the stomach were found to be the seat of general carcinomatous infiltration. Such cases demonstrate the want of something necessary to render a diagnosis accurate. Not

only in rare cases like this, but in many others, only one or two systems of any importance may be present, and these will not be clear enough to warrant a healthy diagnosis.

Dr Pepper had but recently seen a business man, sixtyfour years of age, who had previously enjoyed good health, but was suddenly attacked with severe pain in the pit of the stomach, coming on when the organ was empty. It recurred every night, and extended from the pit of the stomach to the back. The bowels were rather inactive. He had lost thirty to forty pounds, and was pale but not cachectic looking. Most careful search of the epigastrium revealed nothing. The radial arteries were hard; arcus senilis was present; the abdominal aorta pulsated strongly and appeared somewhat enlarged. No evidence of pancreatic disease. Under the institution of a careful diet, the adminis tration of hydrocvanic acid, and the application of th thermo-cautery to the region over stomach and back, a most remarkable improvement was noted. But it was only transient. Months passed and emaciation advanced, and a hardness could be detected close up to the crura of the diaphragm. Patient died, and an autopsy revealed a fungous epithelioma in the superior and posterior walls of the stomach, doubtless involving nervous filaments in the dense adhesions.

The speaker desired to call attention to the application of organic chemistry in the examination of the contents of the stomach. Vomiting occurs so frequently, and the vomited matter is so mixed with portions of the previous meals or with mucous, etc., that it is necessary to remove the contents of the stomach by aspiration. It should be done at a definite time after the ingestion of a definite meal, consisting of a certain amount of mixed, starchy and nitrogenous food. The matter so obtained should be tested for free hydrochloric acid, lactic acid, and peptic strength, that is, the power it possesses to still further digest albumen. The methyl violet is the best test for hydrochloric acid. It is asserted by Riegel, on evidence furnished by thousands of investigations, that, when cancer is present, no free hydrochloric acid will be found in the contents of the stomach six hours after a test-meal. Here, then, we have a point of enormous importance if it be established.

The secretion of the stomach is just as easily obtained as urine. Here, then, a field has been opened that appears to promise large results. These new diagnostic methods may be accepted as possessing confirmed value, although

not regarded as infallible.

Dr. F. C. Shattuck of Boston, said that these modern methods of diagnosis are very promising, but that, for the present, our position must be a waiting one. The hydrochloric acid test is not an infallible one, for free hydrochloric acid has been found in undoubted cases of cancer, and has been absent in atrophy of the gastric tubules, in chronic gastric catarrh, and even in an apparently normal state. Another question to be considered is the quantity of acid present. While the test of the acid is satisfactory and easy of application, yet, unfortunately, we possess no test which can be

put to much clinical use to determine the amount.

We know that in cases of gastric ulcer there is a condition of undue gastric acidity. A method has been suggested by Ewald to gain some light as to the proper performance of digestion. He has taken advantage of the new remedy, salol, which is a combination of carbolic acid and salicylic acid, and is not broken up into these constituent parts in acid vehicles. It passes, hence, through the stomach as a whole, but when it comes in contact with the alkaline secretions in the duodenum it is broken up into carbolic acid and salicylic acid, the latter of which, or its salts, are absorbed and may be detected in the urine. This experiment is of value especially in cases of supposed gastric dilatation. Ewald's investigations led him to think that salicylic acid can be detected in the urine one hour after the time of its administration. The speaker had administered the remedy in 50 cases, in 27 of which the reaction was obtained in one hour, or less; in 13, in one to one and a half hour; and in 10, in one and a half to three hours. These were cases in which the the stomach was in normal condition. He had also given salol in a few cases of gastric disease. In two cases of chronic catarrh the reaction was obtained in one hour. In one case, two hours to three hours and twenty minutes; in a case of gastric irritation, one and a half hour; case of cancer, one and a half hour; and in a second case of cancer, in two and a half hours. The speaker also referred to the cases of gastric dilatation, or suspected dilatation, in the examination of which auscultatory percussion yields the best results.

Dr. Octerlony had for several years made use of chemical analysis in the diagnosis of gastric disease. In no single case did the examination fail to corroborate the diagnosis. In malignant disease free hydrochloric acid was always absent. The speaker referred to some symptoms which are commonly present in malignant disease of the stomach.

Hæmorrhage is of frequent occurrence, reversion of appetite is an early symptom, and a temperature habitually lower than normal is noticed at a comparatively early period.

Dr. J. Whittaker confined his remarks to the consideration of the presence or absence of free hydrochloric acid. The general practitioner is not content with a method that demands execution by a chemist, but there can be no such objection here, for the test is easy of execution. A piece of congo paper dipped into a solution of gastric juice is turned blue by free hydrochloric acid. This is a very sensitive test. Should there be any doubt, then the methyl-violet test may be applied. These are easily obtained. It is rarely necessary to employ the pump. The contents should be obtained several hours after the ingestion of a meal. Lactic acid is sought for by means of the carbolate of iron test.

Does the Absence of Free Hydrochloric Acid Indicate Cancer? On this point all seem unanimous that the persistent absence of hydrochloric acid, day after day, is an indication of the presence of cancer. The speaker did not mean to assert that this was infallibly true, but it was just as certainly an indication of cancer as the persistent presence of albumen was of Bright's disease. Hyperacidity indicates ulcer. It is no more necessary to send the material to the chemist than to send urine for the detection of sugar or albumen. The intensity with which congo paper is colored points to the degree of acidity. An interesting point in this connection is that hyperacidity may cause ulcer, and also be the factor which prevents the healing of the ulcer.

Left Clavicular Gland Enlarged in Cancer of Cervix Uteri.

According to a correspondent in a late issue of the American Practitioner, Petit, Troisier and Raymond, of Paris, France, have each found, as a new symptom or sign of cancer of the cervix uteri, that the lymphatic gland just above the left clavicle is enlarged. If this observation turns out to be a correct one, and one always present, it will become an invaluable aid in diagnosis of many obscure or doubtful cases.

Paraldehyde for Insomnia.

Dr. Keniston, one of the physicians to the Connecticut State Insane Asylums, during the recent session of the Connecticut Medical Society, gave the results (*Boston Med. and Surg. Jour.*, June 7th,) of a trial of this comparatively new hypnotic. In drachm doses, sometimes repeated as often as three times, he found it a reliable hypnotic in most cases of

excitement and restlessness, unaccompanied with pain. It is free from the objections attaching to opium and chloral—leaving the patient bright and cheerful on waking, not heavy and stupid.

Treatment of Abortions.

Dr. R. S. Gregg, Manor, Texas, says (Daniel's Tex. Med. Jour., April, 1888), if the diagnosis of threatened abortion is made, then the following proceedings should be adopted. Absolute rest, elevation of the foot of the bed, cold acidulated drinks, and, most important of all, the patient should be speedily brought under the influence of opiates, to arrest uterine contractions. Ergot is sometimes used to arrest abortion, but to the author seems contra-indicated. Hypodermics of morphia and atropine will accomplish this quickly. When patients exhibit opium idiosyncrasies, some opiate rectal suppository is best. If, after the adoption of these means, the os is patulous, the ovum and membranes protrude from the cervix and hæmorrhage continues, we should deliver at once. Nothing answers so well as the fingers. Antiseptic injections are to be used, if the abortion has been caused by any eruptive fevers, or high temperature from any cause; and when the lochia are feetid. It will often be found that after an abortion, hæmorrhages will occur every two or three weeks. In such cases, pieces of retained placenta, etc., should be diligently looked for, rest in bed, iron and ergot given. Cannabis indica sometimes acts better than ergot. No physician practices long without meeting women who abort habitually. The abortions generally occur at a time when the menses would have appeared. Rest in bed so long as the symptoms last, should be insisted upon. Viburnum prunifolium has been highly recommended by some. Morphia and bromide of potash will relieve the uterine irritability and quiet the contractions. Another important point is to relieve constipation. This continued pressure of a full rectum on the uterus may bring on contractions. Complete cessation of the marital relation during pregnancy must be strongly urged.

Perinephritic Abscess.

Dr. Rudolph Menger, San Antonio, Texas (Daniel's Tex. Med. Jour., April, 1888), was called in consultation with Dr. Boll, who reported to him the following: A farmer, age 39, complained of pain in the right lumbar region. Pulse, temperature, etc., normal. A slight protuberance can be

detected in this region, and on deep pressure, pain. Percussion of the liver normal, also urine perfectly normal. After two weeks of alterative treatment, the tumor gradually diminished in size and form a great deal. There was, however, much more pain, high fever and rapid emaciation. Temperature runs up as high as 105 degrees; pulse weak and very frequent. Aspiration with hypodermic syringe was now made in several places, but no pus could be withdrawn. Dr. Menger was summoned to assist in opening the cavity thoroughly. First an aspiration was made below the last rib, close to the spinal column, and a small quantity of thick pus drawn off. At this point an incision was made down in the direction of the kidney, when a pus cavity, three inches from the surface, was struck; it was found filled with thick, doughy pus, tissue detritus and adhesions. The lower margin of the kidney could be plainly felt. The cavity was washed out with a corrosive sublimate solution, a medium-sized drainage tube inserted, the wound stitched up and dressed with iodoform. After the operation the temperature remained quite normal, varying from 99 to 101 degrees. On the twelfth day the report from the patient was in every way satisfactory.

Dysentery.

Dr. E. M. Bridgford, Mexico, Mo., says (Daniel's Tex. Med. Jour., April, 1888,) this disease is always found in malarial districts, where there is more or less vegetable decomposition. It can be propagated from one person to another by water percolating through where the stools have been thrown out. The treatment of the acute form is very simple. The hygienic conditions of the patient should be improved; the drinking water pure, and sick room well ventilated. The alimentary tract cleared by a saline purgative, and this followed by:

R. Bismuth subn., - - grs. xxx. Morph. acet., - - - gr. ss.

M. Firt. chaat. No. vi.

If symptoms of malarial poisoning are very prominent, tonic doses of quinine must be given at short intervals. Large doses are contra-indicated as dysentery is a disease characterized by nervous depression.

Failure to Cure Suppuration of the Middle Ear.

Dr. J. H. Smith, Dallas, Texas, says (Daniel's Tex. Med. Jour., April, 1888,) there is a mistaken idea among the laiety

and a good many physicians also, that an otitis media will get well of its own accord, if nothing is done for it. A casual examination of the nares, posterior nasal cavity and upper pharynx will show these cavities lined with the same continuous membrane. These localities are often neglected by aurists in treating patients. No examination of the ears is complete unless the upper air passages have been scrutinized. There always remains more or less deafness when the discharge ceases; a mere checking of this does not cure. By a proper medication of the upper air passages, many of these disagreeable after-symptoms may be relieved, and many cured.

Gunshot Wound of the Head.

Dr. William O. Roberts, Louisville, Ky., (Amer. Pract. and News, April 28th, 1888,) was called in consultation with Dr. Godshaw, to see a child three years old, who had accidentally shot himself with a thirty-two calibre revolver. The ball entered the left eye, the direction being through the eve, upward and outward. Brain matter and blood came through the wound, and there was a large swelling behind the left ear. The child was kept quiet by small but repeated doses of morphine, until the next day, when an incision was made over the swelling, from which flowed a quantity of blood and a tablespoonful of brain matter. The much-flattened bullet and several fragments of bone were found just under the scalp. The orbit was enucleated, and it was intended to run a drainage tube through the whole wound; but as the child was evidently sinking fast, the tube was only inserted part of the way, and the wound closed antiseptically. In half an hour, under stimulating treatment, the child rallied well, and morphine was given. The second day after the operation, he was very bright and strong; he insisted upon getting up, and was put on the the floor. Calomel was given at night, but as restlessness increased, gr. \(\frac{1}{4}\) of morphine was given. Five days later the wound was dressed, and a fresh tube inserted three inches. The next night the temperature rose to 104 degrees, pulse 150, followed in a few hours by death.

Specialists and Especialists.

Dr. W. Symington Brown, Stoneham, Mass., says (Amer. Prac. and News, April 28th, 1888,), during the last fifty years great progress has been made in two seemingly opposite directions—differentiation and unification. The same ap-

plies to the medical as well as the physical world. There was a time when there were only two divisions in the practice of the healing art—physicians and surgeons—but now there are oculists, aurists, alienists, gynæcologists, lithotomists, orthopedic surgeons, electricians, dipsomania managers, lung doctors, rectal surgeons, cancer curers, syphilis and gonorrhea specialists, etc.—in fact, nearly every region except the umbilicus, has its corps of good or ignorant specialists. To make a good specialist, one must be a good The definition of a specialist is a medical practitioner. practitioner who, under ordinary circumstances, confines himself to one art. Specialists are, from their position and training, apt to ride hobbies. An especialist, on the other hand, is a practitioner who, while he devotes a large portion of his time to some specialty, is also engaged in general practice.

Materialism in Disease.

Dr. P. D. Sims, Chatanooga, Tenn., says (Amer. Prac. and News, April 28, 1888), in medicine, one looks for two opposite extremes—all causes among agents imponderable, mysterious and mythical, or to reject everything that does not admit of a physical, tangible demonstration. Each disease that, under the scrutiny of the microscope, reveals a specific microbian cause is transferred from the field of accident and uncertainty to the field of fact. The bacillus which produces yellow fever in the human system, can produce no other disease. Every disease that depends upon an organic germ may be classed as preventable, and, theoretically, at least, as exterminable. The profoundest thinkers, who have gone deepest into the mysteries of natural science in search of creative power, have been compelled to exclaim, "life for life is victorious all along," or that "no shred of trustworthy experimental testimony exists to prove that life in our day has ever appeared independent of antecedent life." The sanitarian's work is alone with the causes of disease; the physician, on the contrary, must regard the disease as a condition in a particular individual.

Etiology of Phthisis.

Dr. F. T. Wheeler, Rockland, Sullivan Co., N. Y. (Amer. Prac. and News, April 28, 1888), regards tubercular phthisis pulmonalis as a constitutional specific disease, both infectious and contagious, produced by a specific cause. It may be congenital, but not hereditary in the strict sense of the word. It is usually acquired from contact with a person

having the disease, or by living in the same atmosphere with such an one. There are many things which prepare the system for the seeds of phthisis. The parents, one or both, may transmit to their offspring this peculiar diathesis, or the constitution may have been weakened by disease, non-hygienic surroundings, irregular living, excesses, etc. In any case there is a certain power of resistance which has been impaired or lost to that particular disease. The writer then cites several cases which occurred in his vicinity, substantiating these facts.

Treatment of Aneurism by Iodide of Potassium.

Dr. Robert N. Taylor, Tollsboro, Ky., after speaking of the diagnostic symptoms (Amer. Prac. and News, April 14, 1888), thinks the pain complained of by the patient was due to vascular dilatation, either from pressure or the state of the vessel itself. Fifteen grains of iodide of potassium, three times a day, Dover's powders at night, to secure rest, was ordered; and to keep as quiet as possible, without going to bed, was enjoined. He soon gave up the Dover's powder, as it was no longer needed, and after taking the iodide three months, he expressed himself entirely relieved, and ceased taking anything. A year later, the patient complained of the same pain, which was soon relieved by the Two years after, he died of right cerebral hæmor-The potassium probably acted first in slowing and steadying the heart's action; second, by exercising a controlling influence over an unorganized pulsation of the vessel.

Sciatica (?) Information Wanted.

Dr. George C. Spearman, Pennington, Ga., says (Southern Medical Record, May, 1888), that in 1884 he was in perfect health, when one day in leaning over, he was attacked by a sudden, severe pain at the junction of the sacrum with the lumbar vertebra. This kept him in bed four weeks, after which he was able to walk a little with two sticks. He was soon taken with another sharp attack, which kept him in bed for three months. During this time, the pain extended down the right hip and thigh to the knee. He has never had paralysis, but his general health has given away. thinks he has sciatica with dyspepsia and nervous prostration. He has used, without benefit, theine, strychnia, iron, quinine, nux vomica, salicylate sodium, cohosh, muriatic acid, iodine, iodide of potassium, ergot, and counter-irritants. Hot applications alone give relief. He is anxious to have a correct diagnosis of his case. Write to him.

Prevention of Otitis Media.

Dr. R. O. Cotter, Macon, Ga., thinks (Southern Med. Rec., May, 1888), there is no disease of the ear that calls for more careful judgment. We must discriminate between the slight ear-ache, which passes off in twenty-four hours, neuralgic ear-ache, and that in children from carious teeth. We read a great deal about the treatment of cases after the drum membrane has been ruptured and the disease becomes chronic, but if suppuration can be prevented, then that much is gained. If the pain is severe, it should be controlled by morphine, leeches should be freely applied, and constant irrigation with large quantities of warm water used. Spirits of camphor warmed and dropped into the ear, is soothing and beneficial.

Inflammation of Neck of the Bladder.

Dr. Jno. Thad. Johnson, Atlanta, Ga., says (Southern Med. Rec., May, 1888), there are certain stages of this disease when copaiba, cubebs, oil of sandal-wood, and turpentine exert a beneficial effect, and, indeed, cure. Alkalies sometimes afford relief, too, of which liquor potassæ answers best. With the writer, benzoate of ammonia is a favorite. Dissolved in camphor water with a little morphine, it acts more promptly than anything else. Tincture of cantharides, combined with chloride of iron, is often given, but without benefit. The astringents, such as buchu, uva ursi, pareira brava, triticum repens, hydrangea, etc., are favorites with many. The writer thinks that undoubtedly the best treatment is direct local medication, to the diseased part. This can best be accomplished by a soft rubber catheter attached to a small syringe. The weakest solution which will probably accomplish a cure is the one to be selected. A mild degree of smarting is our guide. Nitrate of silver, in doses of one-eighth or even one-sixteenth of a grain to the ounce of water, is often strong enough to cause a bloody discharge. Sulphate of copper, in like doses for injection, acts similarly to the nitrate of silver. Acetate of lead, one to three grains, sulphate of zinc, twice as strong, are excellent remedies. The injections should be made three times a day.

Antiseptics.

Dr. Duncan Eve, Nashville, Tenn., says (Southern Practitioner, May, 1888), that physical death precedes the germs in their operations, but, unaided, they cannot cause it. Animal ligatures, drainage tubes and sutures give every

favorable aid to infrequency of dressing; absorbent cotton, gauze and lint insure dryness and furnish an equable and rarely dangerous pressure; the arrest of hæmorrhage has never been so pertinentily urged nor so widely followed; plastic exudation is awaited with patience; the aids of gravitation and flexion are sought to counteract the tendencies of reaction to renew the smallest hæmorrhage; and iodoform no longer now is disinfectant or antiseptic, but is reserved to check the tendency to serous oozing. In many particulars, the reform has borne a gratifying yield. Few hospitals have approached the record of the elder Larry, or Percy, or Lucas, or Alanson, or Martineau, or Syme. Their results were a rational wound treatment untrammeled by speculation.

Chronic Syphilis.

Dr. H. M. Lawson, Cuthbert, Ga., advises (Southern Med. Rec., May, 1888), the following:

R. Phytolaccæ decand. rad.

Ferri hydrat.

M. Fiat pil. No. lx. Sig.: One pill after each meal. Keep the bowels moved once a day, and avoid all oleaginous articles of diet.

Teratology.

Dr. W. B. W. Watkins, Eureka, Texas (Southern Practitioner, May, 1888), was requested by Dr. Mills to see with him a negro baby that had been delivered the night before, and which the neighbors said was double-headed. The child was well developed except the head, the diameters of which were: From center of anterior fontanelle to posterior border where the parietal bone ought to be, one and three-quarter inches; from anterior fontanelle to midway between the eyes, one and one-quarter inches, biparietal diameter three inches. The supposed second head was a tumor springing from the occipital region, covered at its base with hair, and a tough shining membrane resembling the dura mater. The antero-posterior diameter was three and one-half inches; circumference at the base, eleven inches. Ten hours after the birth the child died. The post mortem examination showed the brain in a remarkable condition—the cerebrum occupying a lower and posterior portion of the tumor, while the cerebellum and medulla oblongata occupied the

upper portion. There was scarcely any brain substance in the cranial cavity. No cause for this anomaly is definitely known.

Glycerine in Habitual Constipation.

Dr. S. W. Frey, Coopertown, Tenn. (Southern Practitioner, May, 1888), says that having himself suffered from constipation, he tried a rectal injection of a half to a whole teaspoonful of glycerine, and has never failed to procure a passage after its use. It softens the sphincter and renders it less liable to laceration in the discharge of hardened feces, thereby serving often to prevent the initial step in a painful case of hæmorrhoids. Its use can be kept up for a long time.

Hymens.

Dr. E. S. McKee, Cincinnati, Ohio, gives (Nashville Jour., Med. and Surg., May, 1888) the following varieties of hymens: 1. Hymen semi-lunaris, the normal. 2. Annular hymen, with small central opening. 3. Hymen cribriformis, sieve-like, containing many holes like a water pot. 4. Hymen fimbrinatus, similar to the fringe like appendages of the ostium abdominale of the fallopian tubes. This form is most important medico-legally, as it may be taken for the normal hymen which has been torn. 5. Hymen imperforatus. This is a cause for surgical interference. It may also prevent copulation. 6. The bridge shaped hymen is found in rare cases. 7. There exists in some instances an upper anterior and a lower posterior opening, with simply a band lying transversely across the vagina. In rare instances we find a second hymen. 8. Horseshoe hymen. 9. Bilobate hymen. 10. There are some found—wanting.

Unilateral Facial Atrophy.

Dr. H. P. Cartwright, Bowling Green, Ky., reports the case (Nashville Jour. Med. and Surg., May, 1888) of a lady age 49, who has a clear, good history. About ten years ago she had a fainting spell; was unconscious for a long time. Since then she has been almost totally blind in the left eye. A short time after fainting, she noticed what she thought was a pimple on the right side of the upper lip, which he thought would go away in a few days, but it did not. Commencing at this place the atrophy spread over the entire left side of the face. There are several pits in her face. The skin over the greater portion seems very thin and grown

tight to the bone. There is no atrophy of the bone, but the muscles are entirely gone. The tongue and soft palate do not appear to be wasted. There is no perspiration on the atrophic side. There is a hole about an inch in diameter in the left deltoid extending to the bone. The treatment has been tonics and electricity with no improvement, but certainly no relapse.

Quinine in Malarial Hæmaturia,

Dr. F. S. Raymond, Tipton, Tenn., says (Memphis Med. Monthly, May, 1888) that for ten years he gave quinine in this disease, but for five years he has not given a grain but to one man who died. He believes in a Davidson syringe, cold and hot water, Epsom salts, a plenty of wine and brandy, and morphine, which in his experience has always brought the best results.

Maternal, but not Paternal Twin Colts.

Dr. M. T. Harris, Agnes, Texas, puts on record (Southern Practitioner, May, 1888) the following peculiar case: Last Spring a friend told him that a mare of his had given birth to two colts—one being a mule and the other a horse. He had stinted his mare to a jack, and on the fourth day she got out of the stable and had communication with a stallion—the result being the double birth as mentioned.

Diabetes Mellitus.

Dr. Peter R. Ford (Memphis Med. Monthly, May, 1888) says this disease is generally caused by a derangement of the cerebro-spinal nerve function. In all cases the writer has found an engorged liver, spleen enlarged, headache, backache, great thirst, and diuresis. The best tests are Fehling's and Toton's. Dietry is important in the early stages of the disease. In regard to treatment he gives calomel, soda, podophyllin, ipecac and aloes, in small doses, repeated every three hours. This is given for two or three weeks, when it is followed by thirty drops of extract of ergot before each meal.

Cure of Bunion-Resection.

S. T. Armstrong, Ph. D., U. S. Marine Hospital Service of New York, writes (*Memphis Med. Journal*, May, 1888) that bunions are largely the product of civilization, or fashion. As a result of wearing a tight shoe the bursa becomes thickened, followed by inflammation of the articulation. The

great toe becomes more or less displaced. Various remedies have been devised for this affliction, such as modification of the shoe, application of ointments and lotions, wearing mechanical appliances. These may be beneficial in the initiative stage, but are futile when the trouble has been one of long standing. Resection of the metatarsal bone seems to meet the conditions, by removing the diseased bone, affording a base of support for the great toe, and securing a serviceable joint.

Is the Germ Theory Rational?

Dr. J. S. Todd, Atlanta, Ga. (Atlanta Med. and Surg. Jour., May, 1888), says it is claimed that specific microbes are found in the following diseases: Erysipelas, tuberculosis, small-pox, syphilis, measles, diphtheria; scarlet, splenic, malarial, relapsing, typhus, typhoid, and vellow fevers; cholera, pneumonia, pyæmia, leprosy, acute rheumatism, ulcerative endocarditis, pyelitis, gonorrhea, atrophy of the liver, and numerous skin diseases. The writer does not believe that all the above-mentioned diseases are caused by germs, but thinks that all infectious and contagious ones are. The reduction in the number of infectious diseases that so closely and invariably follow the improvements in the water-supply of cities is an argument and practical demonstration that something has been kept back. The best recognized treatment is fresh air and pure water, and as for the drugs nine-tenths of them are germicidal more or less. There are very few diseases we treat without using at some time mercury, cinchona or alcohol. What three better germicides are there than these?

Tracheotomy and Intubation.

Dr. W. S. Kendrick, Atlanta, Ga. (Atlanta Med. and Surg. Jour., May, 1888), says that tracheotomy should not be resorted to until all means have been exhausted, medical or otherwise. If the disease is such as malignant diphtheria, making its great impression, not only on the respiratory organs, but the whole system, the operation will not likely succeed. This operation and intubation, it must be remembered, are not for the cure of croup, but for the relief of asphyxia. Again, the ultimate success of the operation depends on the age of the patient. Children under two years of age give a bad prognosis. Success is much greater in summer than winter and spring. The best time to operate is before the obstruction becomes so great that the lungs

fail to perform their functions adequately, and the system becomes completely anæsthetised. A few simple instruments are all that are necessary. As regards the place, we may choose anywhere from the cricoid cartilage down to the seventh ring. Intubation has this advantage: it is freer from danger, and parents will sooner permit it than tracheotomy.

Antipyrin.

Dr. C. A. Brooks, Atlanta, Ga., states (Atlanta Med. and Surg. Jour., May, 1888) that its chemical name is dimethyloxichimzin. It melts at 113°, and is easily soluble in water. It gives a precipitate with most alkaloid reagents. Treated with fuming nitric acid, it becomes green; with carbolic acid, brownish violet; with salicylic acid, yellowish brown. A healthy man was given 10 grains. One hour later his face had a flushed look and the body glowing. The temperature was reduced from 98½° to 98½°; the pulse from 80 to 70. Three hours later the flushed face disappeared; pulse, Soon after, the patient was drowsy, and the next morning reported as having slept heavily all night, but experienced no bad symptoms. There was no sweating. He has tried it in five cases of typhoid fever, and in only one case did it fail to reduce the fever promptly and exercise a soothing effect on the whole system. Dr. Mundé, of New York, has used it in twenty-eight cases of puerperal fever. It has been used with varying success in rheumatism and pneu-The treatment of supro-orbital neuralgia, sick headmonia. ache, migraine, sciatica, locomotor ataxia, renal colic and asthma has shown its good action. Two fatal cases have been reported in which it was given in large doses, 30 to 40 grains, to patients already much debilitated.

Thoracic Murmurs.

Dr. John B. Enright, Louisville, Ky., remarks (Progress, May, 1888) that in capillary bronchitis we get no sonorous, sibilant, mucous or submucous murmurs, because the large and smaller tubes from which these emanate are not involved; but we do hear subcrepitant murmurs, both on inspiration and expiration. These sounds are dry, intensely sharp, and high pitched. In the first state of lobar pneumonia the vesicular sound is diminished, but the crepitant râles on inspiration are present. In the second stage the vesicular murmur is absent, and we have bronchial breathing. In the third stage liquefaction of the exudation takes place, and moist subcrepitant murmurs are abundant. In the

first stage of pleurisy we generally get a friction murmur. In the first stage of acute tuberculosis the vesicular sound is much modified—almost completely masked; the respiratory murmur high pitched. There may be bronchial breathing. In the second stage mucous, submucous and crepitant murmurs are usually heard, due to bronchitis. In the third stage of excavation we get cavernous breathing and the mucous click.

Address of President of Tulane University, La.

Prof. Wm. Preston Johnston gives (N. O. Med. and Surg-Jour., May, 1888) a very gratifying account of the Medical Department of the Tulane University. During its 54 years of existence there have been registered 8,583 names. During the past session 305 students matriculated—40 more than last year, 80 more than three years ago, and 100 more than seven years ago. It has not been by underbidding, or by so-called "free scholarships," or by braggart advertisements that these students have been induced to come. The course has been extended for advanced students, a most excellent pharmaceutical laboratory has been endowed, and large voluntary contributions have been given for the improvement of the different chairs.

Extra-Uterine Pregnancy.

Dr. S. C. Carson, of Bessemer, Ala., reports two cases of extra-uterine pregnancy (N. O. Med. and Surg. Jour., May, 1888), one occurring in a negress, 40 years old, and of ovarian variety, and the other in one 35 years, in which the child was lying in the abdominal cavity. Both went through the expulsive pains of labor, but died, and at the autopsies the above diagnosis was confirmed.

Change of the Drachm Sign Suggested.

This subject is becoming considerably agitated in a number of our exchanges, growing out of a recent suggestion, strongly urged, by Dr. C. F. Taylor, in a late number of the *Medical World*. It is so easy to mistake n badly written drachm sign (3) for the ounce sign (3) that we are surprised so few errors have occurred in compounding prescriptions. Dr. Taylor proposes the use of the Greek capital letter Delta (\triangle) for the drachm sign instead of the one now in use. We think the suggestion a good one, but to secure general adoption it should receive the endorsement of somebody like the International Medical Congress, or the different English

speaking National Medical and Pharmaceutical Associations or Societies. If the suggestion meets with general professional favor, practitioners and pharmacists everywhere should create a popular demand for the change by contributing, under their individual names, expressions of opinion on the subject through the various medical and pharmaceutical journals, so as formulate a fixed opinion in advance of the next annual meetings of the various States and national organizations.

The Alabamma New Medical Law.

According to a letter from Dr. J. D. S. Davis, of Birmingham, Ala., in the Atlanta Medical and Surgical Joarnal for April, 1888, the Alabama law "now provides that all applicants, from whatever school, to practice medicine in the State, shall stand an examination in the following branches of medicine: Science of chemistry, anatomy, physiology, operative surgery and surgical anatomy, mechanism of labor, and operative midwifery, natural history of diseases, including pathology, physical diagnosis, medical jurisprudence, public and private hygiene-practice and materia medica being left out of the schedule of examination in order that there might be no distinctive difference or diversity of doctrines possible. And though applicants, graduates of antagontstic schools, should stand examinations before the same Board, there is no distinctive difference when diplomas are granted by the Board authorized to make such examinations by the State Medical Association of Alabama."

Dr. Davis seems to think that by this legislation, the difference between the regular profession and the professions of other schools of practice in his State, have been removed in an ethical sense. But if we rightly appreciate the facts and comprehend the argument he presents to sustain the view above expressed, we think he is wrong in his conclusion. The new Alabama law simply places the regular physician, the homopath and the electric equally before the law; but it no more reconciles ethical differences than the results of the late war between the States establishes social equality between the white and the black races of the South-

ern States.

The Virginia law is so much better than the new Alabama law so far as relates to the subject of the question brought up by Dr. Davis, and so effectually removes the difficulties in the way, and is so satisfactory to homographs and regular profession alike, that we are little surprised the

Medical Association of Alabama did not adopt a course similar to that adopted by the Medical Society of Virginia in securing the legislation which makes the Virginia medical examining law the most perfect that now stands on the statute book of any State.

Book Botices.

Essentials of Medical Chemistry and Urinalysis. By SAM. E. WOODY, A. M., M. D., Professor of Chemistry and Public Hygiene, and Clinical Lecturer on Diseases of Children, Kentucky School of Medicine, etc. Second Edition. Revised and Enlarged. With 85 Illustrations. Louisville: John P. Morton & Co. 1888. Demi 8vo. Pp. 140. Cloth. Price, \$1.25. (From Publishers.)

When we received this book, with title so exactly suited to what we felt the profession wanted, we indulged the hope that at last we had exactly the thing. But when we came to examine into some questions relating especially to the alkaloids, we find that too often the physical and physiological qualities of the article are given and the chemistry left out. This section we think needs remodelling. But the deficiencies just noted are compensated for by the value of other sections. For instance, the section on urinalysis is very good, and thus we might speak of the great bulk of the book, which is on inorganic chemistry. Every paragraph is written with an eye to the practical wants of the physician. It is also a good review book. We esteem it highly.

Lesions of the Vagina and Pelvic Floor. By B. E. HADRA, M. D., Austin, Texas. With 83 Illustrations. Philadelphia: Records, McMullin & Co., Limited. 1888. Cloth. 12mo. Pp. 329. (From Publishers.)

While this book has special reference to uterine and vaginal prolapse, of necessity it enters into descriptions of conditions and discussions of facts which, in the estimate of the author, contribute even as causes or complicating effects to such prolapse. For the most part, it is a reprint of serial articles that appeared last year in the *Medical Register*, and hence may be familiar to a large class of journal readers. The subjects discussed are considered chiefly from the surgical or operative standpoint; and therefore the book is

more valuable to the practitioner who resorts principally to the knife. An appendix contains description of an original modification of Sims' amputation of the uterine cervix; a statement of the provisions for the maintenance of the normal position of the womb, with deductions therefrom; and a description of Tait's and Duncan's operations for the repair of rent perineum, etc.

We are glad to be able to commend the book as a good guide for the gynæcologist, which has the advantage that most of the suggestions made have the confirmation of

actual test.

Manual of the Minor Gynæcological Operations. By J. HOL-LIDAY CROOM, M. D., F. R. C. P., E., F. R. C. S., E., Lecturer on Midwifery and Diseases of Woman at the School of Medicine, Edinburgh, etc. First American, from the Second Edinburgh Edition. Revised and Enlarged by LEWIS S. McMURTRY, A. M., M. D., of Louisville, Ky., etc. With Numerous Illustrations. Philadelphia: Records, McMullin & Co., Limited. 1888. Cloth. 12mo. Pp. 228. (From Publishers.)

We think there is need for such a book as this in most doctors' libraries. It is wonderful how much of full, simple and practical description the author does give in a small compass. It is written synoptically, but comprehensively. It covers almost all the minor gynæcological operations, and the American Editor has well filled in possible gaps to make the book come up to date and to make it thoroughly useful. The terseness of Dr. Gaillard Thomas' classical work is not superior to the style adopted by Dr. Croom. The bent of the publication is to make the proper diagnosis in a given gynæcological case and then to apply the proper remedy. A great deal of attention is given to the treatment of symptomatic conditions. We confess to being very much pleased with the book.

Pathology and Treatment of the Infectious Diseases. By KARL LIEBERMEISTER, Professor of Clinical Medicine in Tubingen, Germany. Translated by E. P. HURD, M. D., Newburyport, Mass. With Notes and Appendices. 1888. George S. Davis, Detroit, Mich. PART I. The Miasmatic and Miasmatic Contagious Diseases; Intermittent Fever; Typhoid Fever. Paper. 12mot Pp. 141. Price, 25 cents. (From Publishers.)

This is one of the two volumes of the "Physicians' Leisure Library" by the immortalized German, whose doctrines regarding fever have revolutionized the study of diseases. It comes out in the Library Edition as No. 8 for 1887. But

the doctrines as taught by Prof. Liebermeister have become so well established by leaders that the record of them in their present form is accepted as standard imformation, and thus is good at any time. It is not so "newsy" as valuable to the reading physician. The annual subscription to the "Leisure Library" is only \$2.50. And the books issued are almost invariably of standard value.

Infectious Diseases. Part 2. By KARL LIEBERMEISTER, Professor Internal Pathology and Therapeutics at Tubingen, Germany. Translated by E. P. HURD, M. D., Newburyport, Mass. 1888. George S. Davis, Detroit, Mich. 12mo. Pp. 130. Paper. 25 cents.

This is No. 9 of Series for 1887 of the "Physicians' Leisure Library" which we have so often commended as well selected, practical in descriptions of disease, good in diagnostic memoranda and specially valuable in therapeutical notes. This Part 2, treats of measles, scarlet fever, small-pox, vaccinia, varicella, rubeola and diphtheria. While but little in the way of advance has been contributed to our knowledge of these diseases since the publication of the author's book three years' ago, the additions of notes by the Translator have brought the subjects well up to the day.

Practical Treatise on Diseases of the Skin. By JOHN V. SHOEMAKER, A. M., M. D., Professor of Skin and Venereal Diseases, Medico-Chirurgical College and Hospital of Philadelphia, etc. With Colored Plates and other Illustrations. New York: D. Appleton & Co. 1888. Cloth. 8vo. Pp. 633. Price \$5. (For sale by West, Johnston & Co.,

Richmond).

For the general practitioner, this is the text book he should adopt for practical purposes. Descriptions are good; diagnostic points between diseases bearing a similar phase are clearly made; the drawings well delineate the distinctive features of special diseases; and, above all, the therapeutics suited to given cases are well indicated. The confusing technology of the different schools of dermatologists is not arrayed before the general professional reader so as to add to his troubles in giving a suitable name to a disease. Many personal experiences with drugs for skin diseases are recorded, which give an additional interest to the book. The range of the subjects considered includes those diseases which are most apt to be met with in American practice. An excellent index is added to facilitate ready reference to subjects. The book is issued in the usual excellent style of the popular Publishers—"the Appletons."

Year Book of Treatment for 1887. By TWENTY-ONE ENGLISH CONTRIBUTORS. Philadelphia; Lea Brothers & Co. 1888, 12mo, Pp. 336. (From Publishers).

The medical literature of all countries has been placed under contribution in the compilation of this book of treatment for the year ended September 30th, 1887. Each of the 21 contributors has had charge of all matters relating to different departments for which the authors are respectively well qualified. Thus, Dr. James Ross has charge of the section on nervous diseases; Mr. Treves on general surgery; Mr. Reginald Harrison on diseases of the genito-urinary system, etc. A full index of authors quoted as well as a thorough index of the subjects treated of are appended. Such a book as this cannot be otherwise than useful to the practitioner—especially if he systematically preserves the volumes as they are issued year after year. It tells him of all the new remedies as they are brought out, and of all the new plans of treatment for special diseases as they are advocated.

Accidents and Emergencies. A Manual of the Treatment of Surgical and Other Injuries in the Absence of a Physician, By CHARLES W. DULLES, M. D., F. C. P., of Phila, etc. Third Edition. Revised and Enlarged. With New Illustrations. Philadelphia: P. Blakiston, Son & Co. 1888. 12mo. Pp. 123. Cloth. Price, 75 cents. (From Publishers.)

A better title than the above for this little book is the one printed on the outside cover, "What to Do First, in Emergencies." Wherever there is not a city ambulance system, such a book as this should be kept in every intelligent household. And of "such books," the one now under notice is about the best that we know of. Now that the summer time is coming on when so many of our family patients are going to country seats, to sea shore, to the mountains, etc., where physicians may not be in immediate call, this book should be taken along with the medicine chest or case, and especially should the articles named on pages 107 and 114 respectively be made a part of the armamentarium for the summer months. For families who reside in the country, this book is simply invaluable. Technicalities are avoided, and a copious index helps references when one is in a hurry. Advise your family patients to get this book after reading it over yourself.

VIRGINIA MEDICAL MONTHLY,

[ESTABLISHED APRIL, 1874.]

RICHMOND, VA.

LANDON B. EDWARDS, M. D..... EDITOR AND PROPRIETOR.

Original Contributions solicited from all sections; but the Editor does not hold himself responsible for the views of authors.

Articles contributed to the pages of this Journal must not be duplicated in other journals by the author without proper credit being given to the

Virginia Medical Monthly.

Clinical reports, notes of interesting practical cases, proceedings of societies, etc., are invited from the profession generally. Lengthy theoretical articles not received without author's consent for condensation by the Editor. Rejected articles held one month at disposal of writer.

Editorial.

Richmond Board of Health Report.

The "Annual Report of the Health Department of the city of Richmond for 1887 shows that the President, Dr. T. E. Stratton, has been a most diligent officer, seeking out and abating many pestilential nuisances, and has thus materially added to the healthfulness of the city. It is a misfortune that no sufficient provision is made to ascertain the birthrate in Richmond, but such a provision is not within the powers of the Board. The total population of the city is estimated at 100,000-56,000 whites and 44,000 colored. The deaths for the year numbered 2,025—889 whites (or rate of 15.87 per 1000 population), and 1,136 colored (or rate of 25.82 per 1000 population.) In addition there were 63 white still births, and 122 colored still births. Dr. Stratton has made a number of practical suggestions in his report, which, if adopted by the City Council, would greatly aid his Board in doing good. One element of success of his administration has been the frequent conferences he has had with his Advisory Board of seven well known physicians and a great many others of the profession. Such an officer as the President of the City Health Board ought to be a non-political one, and be for a term of years, so as to

let him become better and better acquainted with his duties.

Medical Society of Arkansas on Quack Advertisements in Religious Papers, and Preachers' Certificates.

Dr. L. P. Gibson, of Little Rock, Ark., Secretary of the Medical Society of Arkansas, furnishes us with a copy of the resolutions recently adopted by his State Society, which relate to matters of interest to the profession throughout the country. We hope practitioners will so educate their friends on the subject as to put a stop to such things. We copy without curtailment the resolutions as adopted April, 1888, in the hope of bringing about a correction of these grievances and palpable errors.:

"Resolved, That the members of the State Medical Society of Arkansas have for years observed with pain and mortification the patronage given to charlatanism in all its multifarious aspects by the religious press of our country.

"Resolved, further and most specifically, That the appearance in religious papers, ostensibly published for the inculcation of truth and morality, of serious homilies on prayer and praise side by side with cures for consumption, cancer, Bright's disease and other incurable ailments to which an editorial endorsement is often given, as well as secret preparations under the cloak of remedies for disease, but really intended for purposes of feeticide and other immoral uses, largely tends to shake the confidence of the profession of medicine in the integrity and purpose of the managers and editors of such journals.

"Resolved, further, That it has been the well-known custom of the profession to render services gratuitously to clergymen, which we do not regret nor do we propose to recall, yet we must assert that the frequent occurrence of endorsements and recommendations of the clergy of peripatetic doctors and advertising charlatans has in many instances

been the only reward of our gratuitous services.

"Resolved, further, That we are aware that the editors of religious newspapers admit the painful situation in which these advertisements place them, and attempt to excuse themselves by saying that it is necessary to take these advertisements in order to obtain means to conduct their papers; but, in the language of orthodox theology, we would say: 'Put behind you that damnable doctrine that we must do evil that good may come."

"Resolved, further, That, as a Society, we declare that the

continued perpetration of the above offenses by some of the clergy and religious press brings harm to the bodies of their constituency, and damages materially their influence upon

the thinking class of the medical profession.

"Resolved, That the Secretary be instructed to furnish copies of these resolutions to the religious and medical press of the United States, to the American Medical Association, and to the State medical societies, soliciting their co-operation in bringing about a correction of these grievous and palpable errors."

Organic Materia Medica.

Messrs. Parke, Davis & Co., of Detroit, Mich., have recently issued a handsome edition of their work on "Organic Materia Medica," and presented us with a copy, for which we return our thanks. This octavo of 300 pages includes the standard remedies of the leading Pharmacopæias as well as those articles of the "Newer Materia Medica," more recently brought before the profession, with short notices of their therapeutics, dosage, etc. The book is very valuable for almost daily reference, and Messrs. Parke, Davis & Co. deserve the thanks of the profession for adding this compilation of useful information to medical literature.

Medical Education in the United States.

Dr. A. Y. P. Garnett, of Washington, D. C., devoted the major part of his address as President of the American Medical Association, during its meeting in Cincinnati, Ohio, May 8th, 1888, to this subject. Practically that address is a systematic argument favoring the abolishment of all graduating medical schools that do not have an average of 50 annual matriculates, and advocates the prolongation of the term of a medical student's life. It also urges the establishment of State and Territorial Medical Examining Boards, and advises to give to such Boards alone the authority to grant licenses to practice medicine, etc.

We would commend to the attention of all other States looking to the establishment of Medical Examining Boards the law of Virginia on the subject. This law places the selection of Medical Examiners in the hands of the Medical Society of Virginia, and hence as a rule competent and worthy Examiners are appointed. In Virginia, no one who has entered the profession since January, 1885, who has not successfully passed examination before this Board can obtain license to practice. Already this law has stimulated the

colleges who furnish graduates to Virginia, up to a higher standard of attainment, and the result is rapidly becoming more and more manifest that the young men entering the Virginia profession are better prepared to practice than many were who put on the harness a few years ago.

In reference to that portion of the address of Dr. Garnett that favors the closing of the doors of colleges that do not have annually more than 50 matriculates, we cannot lend our encouragement. It is too often the case that the colleges which present a smaller number of matriculants furnish excellent classes of young men, and the tutors have better opportunities of imparting information to the *individual* student.

But in the main Dr. Garnett's address makes some good suggestions that will furnish food for profitable consideration.

Lactated Food Wins President Cleveland's Prize,

Messrs. Wells, Richardson & Co., of Burlington, Vermont, ought to feel happy that their "Lactated Food" made Mrs. A. K. Dart, of Hamburg, N. Y., happy. President Cleveland offered a prize for the exhibition of the three best babies during the Aurora Co. (N. Y.) Fair, where they had a baby show this year. Mrs. Dart's little triplets took the prize. They had had dysentery when the mother put them on "Lactated Food." The result is mentioned above. "Lactated Food" is prescribed freely in this section of the country to debilitated infants, and it is rapidly growing in popular favor. It is an excellent food for children, especially now during the summer months.

Messrs. Wm. R. Warner & Co.

Have issued the following notice to physicians, which we

take pleasure in publishing:

"We take this method of denouncing the circulation of certain erroneous reports, as being the outcome of ignorance or malice. We have no connection with the firm of H. H. Warner & Co., of Rochester, who make "Safe Remedies" and other patent medicines. Our advertising is to the Medical Profession, and our Pills and products (Warner & Co.'s) have been used and held in high esteem by the most eminent Doctors during the past thirty years in the United States and in foreign countries. The therapeutic value of a remedy is ascertained by the medical practitioner and it is the province of the manufacturing chemist to prepare

the various medicinal in the most correct, compatible, palatable and convenient manner, by the aid of skill acquired by years of practice and experience. It seems to be necessary to specify Wm. R. Warner & Co.'s Pills and Bromo

Soda with Caffeine to obtain what you want."

It is disgraceful that in this day attempts at such fraud as intimated above can be at all successfully made. Messrs. Wm. R. Warner & Co. put up nothing but pure medicines, and are entitled to the full confidence of the profession. We hope our readers will inform this firm of any impositions that may come under notice.

Dr. Frank P. Foster,

The Editor of the New York Medical Journal, we learn has been quite ill recently from an attack of perityphlitis, but we are glad to learn that he is recovering.

Richmond College Infirmary.

The Richmond City Council has recently appropriated \$3,500 to the support of this Institution with the understanding, we hear, that this amount is to be chiefly applied to the development of an emergency or accident department. We trust that good results will follow this appropriation.

Dr. William A. Hammond,

Whose fame is familiar to every student of medicine, especially in the field of neurology, being about to remove his residence from New York to Washington, D. C., has resigned his chair as Professor of Mental and Nervous Diseases in the New York Post-Graduate Medical School and Hospital, of which School he was one of the founders, and to which his labors and eminence have greatly added an enviable reputation.

American Medical Association.

We regret very much that we have not the room in this issue for a notice of the recent session of this Association in Cincinnati, Ohio, May 8–11. The meeting was well attended, the hospitalities of the citizens numerous and openhanded, and the results pleasant and profitable. The Trustees for the publication of the Journal of the American Medical Association made a most encouraging report, showing that the Journal wound up its fiscal year with 4,572 subscribers, and that the cost was \$16,261.47, while the expenses of

the publication were \$1,217.89 less than the total receipts, which amounted to \$17,479.36—the Journal thus proving a source of revenue to the Association. No one that has taken the Journal will deny that it has been well edited, neatly and promptly issued, and has made for itself a permanent home wherever it has been introduced. The amendments proposed at the former session relating to "members by application" and to the "Board of Trustees" (published in our March number, 1888,) were adopted. Dr. W. W. Dawson, of Cincinnati, Ohio, was elected President of the Association for the ensuing year. Newport, R. I., was selected as the place for the meeting of 1889.

The University of Pennsylvania Fire.

It is with sincere regret that we learn of the loss sustained by the University of Pennsylvania from the fire of May 31, when a portion of Medical Hall and its valuable contents was destroyed. It is a small compensation that the actual pecuniary loss may be entirely covered by insurance. The destruction of valuable specimens in the histological and pathological laboratories, specimens which the greatest amount of labor and money can never replace in exact counterpart, is a calamity to science for which there is no possible moneyed compensation. It is pitiful to think of forty microscopes destroyed, one-third of Dr. Formad's fine private collection burned, not to speak of innumerable charts, diagrams, wet specimens, some of Prof. Leidy's anatomical treasures, portraits, and a number of ordinary appointments to the Museum. As we have said, money cannot replace many of these things, and any substitution must involve a pitiful outlay of time and labor at the hands of those who alone are able to do the work, and whose services are most valuable. It is always a pitiful thing when an accident necessitates the repetition of work once well accomplished, as was supposed, for a lifetime. We are glad to learn that the valuable Stillé library was not damaged beyond repair, and we congratulate the Faculty and Trustees of the University that the fire did not occur earlier in the college year, when it would have occasioned a greater interruption to the year's course, now near its termination. The students who were on the scene acquitted themselves well in the effort to save the collections. The disaster was most unfortunate, and is deeply regretted by all who are interested in medical science and the University of Pennsylvania, where it is fostered.—Med. Register, June 9th.

Obituary Begord.

Dr. William J. Moore.

The announcement of the death of this eminent physician on May 19th, 1888, at his home in Norfolk, Va., caused mourning in many a household. The sad story is told in the following well epitomized sketch of his life written by friends who were near and dear to him. He was among the first of the Fellows of the Medical Society of Virginia, and was ever active in work for its good but always declining its honors. While he contributed but little to the literature of medicine, yet his ability and his interest were shown on every hand; and his conversations and consultations with those fortunate enough to enjoy his personal friendship and confidence so impressed his hearers that they felt that while with him they were learning much. Living, he exerted a wonderful amount of influence for good, and "being dead, he vet speaketh." But we must not satisfy our desire to say more when what we would say is so much better said in the following tribute by his daily companions:

At a called meeting of the Norfolk Medical Society, held on the evening of May 19th, 1888, occasioned by the death of Dr. Wm. J. Moore, its senior member, on the afternoon of that day, the committee (Dr. H. M. Nash, A. T. Tunstall and Wm. H. Shepherd) appointed by the President, Dr. Jas. D. Galt, reported the following memorandum and resolu-

tions which were unanimously adopted:

We are convened this evening to unite with one another, in mourning the death of Dr. Wm. J. Moore, an ex-president, and the senior member of our Society; and in expressing, though with imperfect utterance, the sentiments of love and esteem which have ever been borne by its individual members, towards that noble, courtly gentleman and accom-

plished physician.

The health of our late friend and elder brother, had been for many months precarious; the infirmities of age had bent his manly form; and yet, though aware of his own physical condition, he strove to within a few days of his death, to perform the arduous duties of his calling, and at last succumbed to a complication of diseases which his own vigorous organism could not withstand.

Among the many lovable features in the character of the deceased, we may dwell particularly upon his uniform courtesy and consideration for those of the profession younger than himself, and many of us can bear testimony,

as well to his kindness of heart, as to the value of his counsel.

Dignity and courtliness of manner, a tolerant, deferential spirit, generous instincts, artistic and cultured tastes, were other distinctive characteristics of our late professional brother.

Dr. Moore was born in Norfolk, June 19th, 1819. He received a classical education in the best schools of his native city, and subsequently pursued his studies in the Literary Department of the Jefferson College. He then began the study of medicine in this city, under the late distinguished Dr. Thomas F. Andrews, and finished his medical course at the University of Pennsylvania, graduating in April, 1841. From this date, with the exception of (during his early professional life) a cruise made in the U.S. Brig of War, Oregon, as its surgeon, he practiced in this city, and his reputation as a surgeon was deservedly high. In 1855 he was appointed the surgeon of the U.S. Marine Hospital at this Port, which position he held until the breaking out of the late War between the States in 1861.

During that War, he was a division surgeon and subsequently the surgeon in charge of one of the Confederate States General Hospitals in Richmond.

Since 1865, Dr. Moore has pursued diligently the practice of his profession here, and was latterly perhaps more conspicuously noted for his skill in obstetrics.

His abiding interest in literature made him a firm friend, patron and counsellor of the Norfolk Library Association.

With this brief reference to the virtues of our late friend,

we unanimously

Resolve, 1, That in the death of Dr. Moore this Society deplore a loss as not only affecting itself, but of the entire community.

Resolve, 2, That we extend to the afflicted family of our deceased brother, our sincere sympathy and condolence.

Resolve, 3, That this Society will attend the funeral in a body, and wear our usual badge of mourning for thirty days.

Resolve, 4, That a copy of these proceedings be transmitted to the family.

Dr. Edward Greeley Loring

Died suddenly at his home in New York city, April 23d, 1888. He was born in Boston, September 28th, 1837. As an ophthalmic surgeon especially had he gained a national reputation, which was well merited.

VIRGINIA MEDICAL MONTHLY.

VOLUME XV-No. 4.

WHOLE NUMBER, 172.

RICHMOND, JULY, 1888.

Original Communications.

ART. I.—Ichthyol—A Sketch of its History, Chemical Nature, and Therapeutic Uses. With a Parenthetical Note about Value of Pilocarpine in Mumps.* By R. M. SLAUGHTER, M. D., Theological Seminary, Va.

Of all the new remedies introduced within the last half decade which are proving valuable as therapeutic agents, few, I believe, will take a higher place than the drug which I have chosen as the subject of this paper.

My own experience with ichthyol, though as yet limited, has been sufficient to convince me that it is of far too great value to be overlooked; and in this opinion, I am sure, those of you who have given it a fair trial, or, who heard the report given by Dr. O'Brien, at our last meeting, of the results obtained from its use will agree with me. Pardon me, therefore, if I tax your patience in giving you as full an account as I have been able to collect of reliable material concerning the history, nature, therapeutic properties and uses of ichthyol.

The first mention we find made of ichthyol was by a

^{*} Read before the Alexandria [Va.] Medical Society, June 12th, 1888.

chemist of Hamburg, Dr. Schrötter, who in 1882 (Monatsschrf. Prakt. Dermat), described its origin, manufacture, and properties. Its introduction as a therapeutic agent is due to Unna of the same city, the celebrated dermatologist—its use having been suggested to him by Schrötter. He first tried it in some cases of eczema and psoriasis, and his results were reported by him as very satisfactory (Monatsschr. f. Prakt. Dermat.)

The chemical nature of ichthyol was first studied by Baumann and Schotten, and in 1883, they described (Monatsschr. f. Prakt. Dermat) ichthyol or fish-oil (『文のようなこの) as being the result of the action of concentrated sulphuric acid upon a clear, yellowish brown oil, obtained by the distillation of a bituminous mineral found in Tyrol. This bituminous rock or shale, according to V. Fritsch, contains the fossilized remains of prehistoric fish and marine animals.

The product obtained by the action of the sulphuric acid upon the above mentioned oil is neutralized with soda and purified for commercial purposes. This compound has the chemical formula $C_{26}H_{36}S_3Na_2O_6$. Its chemical composition is as follows:

Carbon55.05	per cent.
Hydrogen 6.06	
Sulphur 15.27	
Sodium	
Oxygen	
011,8011	

99.99 per cent.

Its proper chemical name is the ichthyo-sulphate or the sulph-ichthyolate of sodium.

Ammonia is also used as a neutralizing agent in its manufacture, giving rise to an ammonium compound, the *ich-thyo-sulphate* or the *sulph-ichthyolate* of ammonium, and this is the preparation generally used in this country.

This ammonium sulph-ichthyolate, is, as is well known, a dark, reddish brown syrup-like liquid, of a burning taste and odor.

The chemical characteristic of the ichthyol compounds is

their richness in sulphur. This sulphur is, says Lartigeau, so intimately combined that it can be only extracted by complete decomposition (*Gazette des Hopiteaux*, 1887, Ix, 165).

The ichthyol preparations, according to Baumann, have a great affinity for oxygen, and act as powerful reducing

agents.

The sulphur constituent, together with the considerable proportion of oxygen, represent, says Unna, the essential

and active principle of the drug.

Another characteristic of ichthyol is its solubility. It is perfectly soluble in water in any proportion, partly so in alcohol and ether, and readily soluble in alcohol and ether combined. It is also miscible with fats and vaseline in any proportion. Its practical value is greatly enhanced by this

property of easy solubility, say Ziemssen.

As regards the *physiological action* of ichthyol, little is yet definitely known. Dr. Jos. Schmidt of Berlin (*Therap. Gaz.*, 1886, p. 374) says: "The sulphurous constituents of ichthyol belong partly to the sulpho-group, and are partly attached to the carbon. As the sulpho-acids themselves exercise little or no action on the animal organism, the therapeutic action of ichthyol must be referred to the sulphur attached to the carbon."

The ichthyol preparations are described by Unna as powerful antiphlogistics. He ascribes this antiphlogistic action to the reducing powers of the drug, which acting upon the endothelium of the blood-vessels deprive it of its oxygen, and thus contract the lumen of the vessels.

When taken internally, the drug is innocuous, even when taken in the largest doses. Dr. Von Nussbaum states that he has taken as many as 50 pills, each containing a grain and a half, a day without the slightest unpleasant effect. According to Baumann and Schotten, doses of from three to five drachms caused, in dogs, copious intestinal discharges, continuing for several days.

We come now to the *therapeutic uses* of ichthyol, and shall first consider its special indications as an external applica-

tion.

Ichthyol is especially indicated as an external remedy in

subcutaneous tumefactions, and in irritations and inflammations of the skin (Lartigeau). According to both Unna and Lartigeau, it is specially valuable in acne rosacea, in either the erythematous or eczematous forms, causing the veins and venous capillaries to return to their normal calibre, promoting absorption of the thickened skin, causing the pustules to disappear, and obviating the tendency to fibroid changes (Unna). In these forms, with the epidermis smooth, thin, or scaly, with tendency to congestion, ichthyol should be used in weak solutions, 2 parts to the 100 (Lartigeau). In acne indurata the epidermis being thick and rough without tendency to eczema, stronger solutions should be used, as from 10 to 25 parts to the hundred. Its chief advantages over sulphur in this disease is that no fear need be had of the effect upon the eyes.

In the many forms of eczema, acute and chronic, ichthyol is a most valuable remedy. Its effect in relieving itching is wonderful. It is, indeed, as says Lartigeau, a sovereign rem-

edy for pruritus.

In various other skin diseases ichthyol is highly recommended, such as urticaria, erythema, herpes, lichen, pityriasis, in both the acute and chronic forms. In the chronic forms, however, it should be given internally as well as applied locally. Whenever the epidermis is broken, the strength of the solution used should be weak. In affections of the scalp and other parts covered with hair, ichthyol possesses great advantage over sulphur, tar and other remedies on account of the easy application of its aqueous solution. In the treatment of leprosy, psoriasis, sycosis, and lupus, it is only a useful adjuvant (Lartigeau).

Probably the most convenient form for external application is the aqueous solution, which may be of any desired strength, and may be applied with a brush or gently rubbed in with the finger. In all cases, Lartigeau advises that the part be covered with a little cotton when the application has

been made.

In burns of the first and second degrees it is said to be an excellent remedy, relieving pain and preventing the formation of blisters.

It is highly recommended by various writers in *incipient* furuncles, ædemas, rheumatism—articular and muscular—neuralgia, lumbago, sciatica, gout and migraine. Schweninger says that in these affections local applications of ichthyol act more powerfully in allaying pain than any known remedy. It should be used either in full strength, or slightly diluted if the pure preparation cannot be borne.

According to Lorenz, a beginning mastitis or panaritis is always aborted, or if fully developed the pain is much relieved. Its prompt use prevents the discoloration following contusions, and a ten per cent. solution hastens the cicatrization of badly healing ulcers.

Dr. Hayes Agnew considers ichthyol preparations the most powerful of known therapeutic agents in bringing about the reduction of inflammatory enlargements, and has had particularly good results in recently enlarged lymphatics. He used the ammonium sulph-ichthyolate and lead iodide in equal parts, generously applied and covered by oiled silk.

By Unna, Lartigeau and others, its value is highly esteemed in erysipelas, and strong ointments should be used. In erysipelas of the scalp, Unna advises that a twenty or fifty per cent. ichthyol ointment be applied daily. When associated with high fever, he uses ichthyol dissolved in ether as a spray, over which the ice bladder can be placed. For erysipelas of the extremities, he uses the following formula:

M. S.—Brush well over the parts.

He also states that in keloid and the scars of acne, variola, etc., the frequent application of ichthyol ointment or collodion causes disappearance of the scars. Ichthyol one part, and ol. cadina two parts is also considered by him a useful formula.

Lorenz, Surgeon to the Alexander III, Uhlan Regiment, speaks highly of ichthyol (*Deutsche Med. Zeitung*, No. 59, 1887). This writer has tried it in wounds and deep loses of substances, as well as in superficial lesions. As a substitute

for cold compresses and the ice-bag, and as an adjuvant, especially where an instantaneous use is needed, he has found ichthyol to produce its effect more quickly and surely. Pain and swelling disappeared after from one to three inunctions, and, besides, ichthyol has the advantage of not needing to be renewed so often, and consequently the injured part can be allowed to remain undisturbed. In the treatment of injuries, he has given up the use of hydro therapy and other commonly used plans of treatment for ichthyol.

In the excoriations common among children and in all solutions of continuity of the skin from which they often suffer, in burns and frost-bites, in acute coryza and inflammations of all kinds upon the mucous membrane or skin of the nose, and in furuncles in the nostrils, he considers ichthyol applications of 1 to 10 per cent. strength very valuable.

It has also given for him the most satisfactory results in facial erysipelas. Von Nussbaum considers it of great value in erysipelas, producing results obtainable by no other means, namely, the immediate arrest of the disease. This remarkable effect, he ascribes not to the influence of the drug upon Fehleisen's cocci, but rather to the change in the tissues, by virtue of which they cease to favor the growth of the micro-organism.

It cannot be said that we have any sufficient ground for holding that ichthyol has any antiseptic powers of consequence. It may however be readily combined with antiseptics. Lorenz considers a combination of ichthyol with parafine ointment, to be the best preparation for general use.

Dr. Edward Martin (*Philadelphia Med. Times*, No. 528) from personal experience regards it a valuable remedy in:

- 1. "Affections characterized by inflammatory enlargements.
- 2. "Affections characterized by pain of peripheral origin, probably depending on inflammation or congestion. For either of these conditions, a powerful antiphlogistic would be indicated; so that the clinical indications for the use of the drug correspond to its alleged therapeutic effects."

All writers on ichthyol agree that when the surface of the skin is broken or irritated, weak solutions should be used; but when the skin is unbroken and the subcutaneous tissues are to be affected strong applications, of not less than 50 per cent. strength, must be used. When these stronger applications are made use of the skin should be well washed with soap and warm water and dried before each application.

In adenitis (cervical), Martin found ichthyol valueless, but admits that this might have been due to the weak application used—ten per cent.

Ichthyol is said also to be useful in all hæmorrhages, and to stop the pain of toothache, a drop or two on a pledget of cotton should be placed in the aching tooth, or rubbed on

the adjacent gum.

Let us now, having passed in review the principal external uses of ichthyol, take a brief glance at some of the conditions in which the internal employment of the drug is advocated.

The proper *dose* for internal administration is from 15 to 30 grains daily, and for children, from 3 to 7 grains (Lartigeau). When it is to be given for a long time, 15 grains daily will be sufficient (Unna).

Von Nussbaum, of Munich, has made this drug a special study, and he states (Zeitschrift für Therapie, Jan. 15, 1888) that he has found it efficacious in all diseases in which there is hyperæmia and an eulargement of the capillaries. "As the drug contracts these enlarged capillaries, it can be easily understood why it acts so beneficially upon asthmatic complaints, digestive troubles, and those neuralgias of the pelvis which are undoubtedly more or less due to circulatory anomalies and vascular enlargements. This also explains why iehthyol is at times used without avail in similar diseases."

Dr. Von Nussbaum found that the drug is most valuable in that class of painful neuralgias of the bones, joints and muscles which are attended by difficulty in moving, and which for months had been treated with other remedies. In such cases, ichthyol effected a eure in a couple of weeks.

In cases of gouty inflammation, where the motion of the limb or joint had been greatly impaired, and every movement accompanied by a cracking sound, as soon as the ichthyol treatment was commenced, the pain first subsided, and soon afterwards the stiffness gradually disappeared, and movements became possible and painless.

He advocates beginning treatment with from 3 to $7\frac{1}{2}$ grains twice daily, and increasing the amount, if this is not sufficient; and as soon as the desired effect is attained, to discontinue the remedy, in order that the patient may not become used to it. If after a time the symptoms return, the treatment may be renewed, always beginning again with doses the same size as the final dose of the previous treatment.

The drug may be given in pill or capsules, or in solution. Its unpleasant taste and odor, it is said, may be disguised by the addition of a little alcohol, in which equal parts of cumarine and vaniline are dissolved. Unna says it may be taken in wine or beer.

It is useful internally in the chronic forms of all the diseases in which the external application is indicated, and in obstinate acute cases.

Unna claims that as an internal remedy in chronic cases neither arsenic nor the sulphur compounds can approach it in value. Lartigeau recommends its trial in obstinate bronchitis and bronchial catarrhs in the place of sulphur waters. He also states that its internal administration is of great value in chronic skin diseases, in furuncles, in bronchial catarrhs, and rheumatismal manifestations, where it is best given in pills of 3 grains each. It is also recommended in catarrhal gastric affections and chronic constipation. Unna says that in that variety of eczema termed scrofulous or tuberculous, complicated with inflammations of mucous membranes, as rhinitis, otitis media, phlyctenular keratitis, cheesy degeneration of the glands of the neck, etc, ichthyol is often useful, acting as a mild anti-tubercular remedy.

In conclusion, I will add only a few words in regard to my own experience with ichthyol. As yet I have used it only as an external application, but almost always with marked success. In a case of facial erysipelas it entirely arrested the disease, and cured the part already affected in three days. In this case a 30 per cent. ointment was used.

In a case of commencing mastitis, a 50 per cent. ointment, with a small quantity of belladonna extract, afforded considerable relief from the very first application. In twenty-four hours there remained no danger of the gland suppurating, and in three days it had returned to its normal condition. It may be asked, Was it not the belladonna that accomplished this result? I answer, No. In the first place, there was not enough in the mixture to have done so, though it may in some measure have acted as an adjuvant to the ichthyol. While it is true that I have accomplished the same result with belladonna alone, I have never seen the pain and soreness of the gland so promptly relieved, nor a cure effected so quickly. I am inclined to regard the combination of ichthyol and belladonna extract as better than either alone.

Just here let me say that to get the best effect from ichthyol applications, they should be well rubbed into the skin, which should be clean and dry.

I have found it a most excellent application for contusions, sprains, strains, and various base-ball injuries, relieving pain, soreness and swelling in a very short time.

In a case of *whitlow*, where it did not entirely stop the formation of pus, it greatly alleviated the suffering and lessened the extent of the disease.

In another case, a young unmarried lady, who had suffered for years from pain and soreness of the left ovary, especially at her menstrual periods, and when using to any extent her arms, as in sweeping, has been greatly relieved by application over the ovary of an ointment of ichthyol.

Quite recently I have used a 50 per cent. application to the parotid glands in *mumps* with most marked effect in relieving the pain and soreness. In two or three cases in which a *testicle began to become painful*, it afforded almost instantaneous relief.

In speaking of *mumps*, let me say that I have been able to abort several cases by the use of *pilocarpine*, only giving:

a single dose of $\frac{1}{8}$ th of a grain. This was followed by free sweating, a slight salivation, and gradual subsidence of the disease. In some of these cases ichthyol was used; in one it was not.

I will not detain you longer to say more in regard to the value of ichthyol. It is a remedy that we cannot afford to overlook or cast aside without giving it a fair trial. Let me, however, remind you that, like every other good drug, it must be properly used if we expect to get its good effects. Try it, try it fairly, and you will agree with those who have learned its value—that it is "one of the few, the immortal drugs, that were not born to die."

ART. II.—(I.) Continuance of Menstruation after Complete Removal of both Ovaries. (II.) Fibroid Tumor of the Uterus. By WILLIAM GOODELL, M. D., Professor of Clinical Gynæcology, etc., Phildelphia, Pa. A Clinical Lecture Delivered at the Hospital of the University of Pennsylvania. Reported by Wm. H. Morrison, M. D., Medical Stenographer, Holmesburg, Philadelphia, Pa.

Gentlemen,—I present this morning a very interesting and exceptional case—one which goes to prove, what I have often told you, that there are no iron-clad rules in medicine. Case I.—Continuance of Menstruation after Removal of Ovaries

The woman now before you was operated on a year and a half ago—öophorectomy being performed. I wholly removed both ovaries and tubes, leaving nothing of them behind. She was under observation for a long time before the operation was resorted to. First, she was under the care of the Medical Department, complaining of constant headache and pain in the ovarian region. Getting no better, she was then turned over to the Eye Department. Her eyes were examined and glasses ordered; but these did not afford much relief. She was then sent to the Nervous wards, where she remained some time, and she was then transferred to my Department.

She complained of constant headache and ovarian pain, and the menses were profuse. She was treated in various ways without much apparent improvement. I then asked one of the gentlemen of the Medical Department to examine

her again. He thought that he detected evidences of syphilis, and on this supposition she was placed on a specific treatment. She afterwards found out what was thought to be the matter with her and was very indignant, declaring positively that she never had had any specific disease. The treatment had no effect on the symptoms, and I think that the suspicion was a groundless one.

At this time I did not feel justified in removing the ovaries, as I could not trace the symptoms directly to these organs. The ovaries could be felt enlarged; but they were not adherent, and it did not seem clear to my mind that they were causing the trouble. She was curetted and given a variety of internal remedies, but without causing much improvement. She then passed from observation for a time.

Some months later she came to my office with the request that I should remove her ovaries. I told her that I could see no positive relation between her symptoms and these organs. She, however, felt that they were the cause of all her troubles, and stated that if I still refused to remove them she would have the operation performed by some other surgeon. I, however, still declined to do it. Some months later, on a very stormy day in winter, she again came to me, saying that she was too miserable to work, and had been turned out of her room. So I sent her to the Hospital, and after carefully going over the case again, I concluded to remove the ovaries.

The operation was then performed, and both ovaries were found to be much enlarged. They and the tubes were wholly removed; to this I can swear. All the symptoms showed marked improvement after the operation. For a few months menstruation ceased; then it reappeared, and the intervals have gradually become shorter, until now she has menorrhagia with great pain. This is so severe that she is unable to follow her occupation of nursing. We have curetted her without much improvement. There is still a great deal of pain in the left ovarian region. After the curetting she was better for a time, but afterwards the hæmorrhage returned.

As the patient is now under ether, I shall at once proceed to examine her. I wish to determine whether or not there is anything in the cavity of the uterus, as a polypus or a fibroid tumor, which would account for the bleeding. I cannot detect any thickening of the broad ligaments, and I find that the womb is perfectly movable and in a good position.

I shall now rapidly dilate the cervix, just as we do in cases of dysmenorrhoa. We first cleanse the vagina with a 1:2000 solution of corrosive sublimate and disinfect the instruments used. Before beginning the operation I slip into the bowel a suppository containing one grain of the aqueous extract of opium, so that, by the time the effect of the ether has passed off, the opium will be pretty well absorbed. As soon as the cervical canal is opened, a quantity of mucus escapes. In order to dilate the cervix properly, fifteen to twenty minutes are required. I have to-day dilated more rapidly than usual, because the cervix has been stretched open before.

I now carefully wash and disinfect my hands. This is an important precaution. Even in such a simple operation as the introduction of the catheter, it is wise to cleanse the vulva and yestibule with a 1:2000 solution of the bichloride of mercury, or with a carbolic acid solution, and thoroughly to clean the catheter. In this way are avoided all risks of carrying septic material into the bladder and causing cystitis.

Holding the anterior lip of the uterus with a tenaculum, I gradually introduce my finger into the cervix. I find simply a thickening of the posterior wall of the uterus. There is no projection, inward or outward, as of a fibroid tumor.

This thickening may be of the same nature as a fibroid tumor. Yet we frequently remove the ovaries to stop the hæmorrhage from a fibroid tumor, and in my experience this operation has hitherto in cases of fibroid always arrested menstruation and therefore has always stopped the bleeding due to the tumor.

"I shall now wash out the cavity of the uterus with the bichloride solution. There is here no danger attending this, as the cervix is thoroughly dilated.

When fluid is thrown into the uterus in which an avenue to a free escape is not provided, there is danger of causing painful uterine colic and peritonitis, and women have lost their lives as the result of intra-uterine injections. The rationale of the symptoms in such cases is not always clear. Some believe that the fluid is carried through the Fallopian tubes into the peritoneal cavity, thus exciting peritonitis.

Whatever be the cause, the fact remains that if any liquid be injected into the cavity of the uterus there is danger of causing uterine colic, collapse, and even fatal peritonitis, if a free escape for the fluid is not furnished.

What shall we do for this patient? I shall order her ammonium chloride and ergot—the remedies which we employ in the treatment of fibroid tumors; and as we have the

canal dilated, I shall again curette the uterus.

Wherever there is a fibroid growth there is a redundancy of blood, and wherever there is an overflow of blood there will result over-nutrition, from which we get vegetations in the cavity of the uterus. In such cases the blood comes more from the vegetations than from the tumor, and a thorough curetting will often greatly lessen the hæmorrhage caused by a fibroid.

Let me now say a few words with reference to the removal of the ovaries. This is an operation which I have done a great many times. In all of them I have had but three in

which menstruation persisted after operation.

The first case was that of an unmarried girl with a tumor of the uterus. It was impossible to arrest the bleeding. The only way in which it could be stopped was by the use of a tampon, and this was only temporary. As soon as the tampon was removed the bleeding recommenced. My impression was that the growth was a fibroid tumor. I extirpated the ovaries, and menstruation ceased for a number of months, her general condition becoming much improved. Some time later, however, the monthlies returned, and she came back to the hospital. With the curette I removed some extraordinary looking masses, resembling tapioca in appearance. The growth proved to be a sarcoma of the womb. We should not of course expect removal of the ovaries to cure sarcoma of the uterus, although it here greatly relieved the symptoms for a while.

The second case was one in which menstruation persisted for two and a half years after operation. I do not think that it diminished at all, but it ultimately stopped, I believe, of its own accord, and since then the patient has been

doing well.

The third case is the one which I have just shown to you. Various theories have been advanced to account for the continuance of menstruation after the removal of the ovaries. One explanation is the presence of supplemental ovarian tissue. There will sometimes be found disseminated in the broad ligament, at some distance from the ovary, small miliary bodies containing true ovarian stroma. number of cases have been reported in which this was present. Again, in some cases a third ovary exists. There is a case reported in which a well-known operator removed both ovaries some two years ago, and the woman afterwards became pregnant. Another case is reported, from St. Louis, in which pregnancy occurred after removal of both ovaries. At the meeting of the Surgical Society of Germany, some five years ago, Koch presented a cancerous uterus which was furnished with three ovaries and three Fallopian tubes.

Another explanation of these cases is, I think, found in the fact that the ovarian tissue is not wholly removed. In the case that I have shown to-day I am certain—absolutely certain—that I removed the whole of both ovaries. I am always very particular in regard to this point, for some years ago I got a lesson which I shall never forget. I at first used to remove the ovaries by the vagina. This is a very pretty operation, for it leaves no scar and it can be kept secret; but, at the same time, it is not so safe an operation, and occasionally the operator cannot reach the ovaries from below. In a case operated on by me in this way, I removed one ovary without difficulty, and then grasped the second with the fenestrated polypus forceps. Suddenly almost the whole of the ovary came away in the bite of the forceps. I tried to find the portion that was left, but it was very small, and it could not be reached. The operation in this case was performed as a cure for masturbation and excessive menorrhagia, yet both of these conditions continued uninfluenced by the operation. I again operated—this time by the suprapubic method. I found that the portion of ovary left was not so large as a small bean, but that was sufficient to keep up the menstrual flux.

This experience has made me extremely careful not to leave any ovarian tissue behind. If there is the slightest doubt, I pick away the suspicious portions of the ovarian stump with forceps, or char it with the actual cautery. Hence, as I am always very particular in this respect, I know that I removed both ovaries in this case. She may have a third ovary, or she may have supplemental ovarian tissue, or menstruation may have become a habit. Even if the thickening of the posterior wall of the uterus were a fibroid tumor, it would not explain the hæmorrhage, for the removal of the ovaries is the remedy for such growths. Indeed, I have never failed in this way to arrest the hæmorrhage coming from uterine fibroids. We shall have to put this case down as one of the exceptions to the rule.

I might say one word further in reference to this subject. Does removal of the ovaries unsex a woman? I have had a good deal of experience in this matter, and have investigated the subject. I think that there is no question that for the first few months, and in some cases years, after the removal of the ovaries, the sexual passion remains unaffected. If the health has been deteriorated by the disease, sexual passion may be increased rather than diminished by the removal of the ovaries. My conviction is, however, that after the lapse of time, say two or three years, there will be a diminution in the sexual instincts and in some instances an absolute extinguishment.

CASE II .- Fibroid Tumor of the Uterus.

Our next patient is 41 years of age, a widow, the mother of seven children, the youngest being 14 years of age. She has had two miscarriages. Two years ago she met with an accident in which she was struck and hurt very severely. Subsequently to this she noticed a lump in the left ovarian region. She attributes the lump to this accident. She has a good deal of pain in the left side and in the back.

I introduce the sound into the uterus, and find that movement of the tumor causes the sound to move. This shows an intimate relation between the womb and the growth. The womb measures five inches in length, and this unusual length indicates that there must be something growing in it. Hence the conclusion is irresistible that we have here a fibroid tumor partly sub-peritoneal and partly interstitial

The proper treatment of this case is the administration of ammonium chloride and ergot, continued for months. This will often do a great deal of good. Of the first I shall order 10 grains in water after each meal, and of the ergot 20 drops of the fluid extract three times a day. If the patient is under close observation, this may sometimes be increased. If the ergot produces pain, the dose should be diminished.

How do you know that the treatment is doing good? The great sign is diminution in the amount of hæmorrhage and an increase in the length of the intervals between the monthly periods. You also gain information by observing the length of the womb. If at the first examination it is five inches, and then comes down to four inches in the course of a month, you know that the treatment is doing good.

What is the rationale of this method of treatment? The ergot causes tonic contraction of the walls of the uterus; this of course means less blood in the tissue, and, as a result, a portion of the nourishment of the tumor is cut off and it decreases in size. The ammonium chloride is a potent absorbent and is serviceable in all forms of glandular enlargement. I have seen under this treatment many fibroid tumors lessen greatly in size and give no further trouble, but I have never seen a fibroid tumor wholly disappear under this treatment. So do not promise too much to your patient.

Sometimes the ergot acts best by being injected under the skin; but this gives much pain, and it is liable to discolor the skin. The best site for these injections is the abdominal wall between the umbilicus and the symphisis pubis. Ergotine is the best form of the drug to be used hypodermically.

ART. III.—**Tait's Perineorrhaphy.** By JOHN B. HAWES, M. D., (of Washington, D. C.) First Assistant in Female Department of Stephan's Hospital, Reichenberg, Bohemia.

In seeking to master the details of this simple plastic operation, I found the existing descriptions of it so obscure that I feel justified in the endeavor to make plain to the general practitioner, an operation of much value, though

not generally understood or practiced. Tait's own description of his method is difficult to understand, and in the English language, his is the best article on the subject that I am familiar with. In a pamphlet by Professor Max Sänger of Leipsic, a much clearer explanation is given.

Although I have accepted the name of Tait's perineorrhaphy for this operation, I am aware that in a discussion in the Obstetrical Society of Philadelphia on Emmet's operation for prolapse of the vagina and lacerated perineum, it was held by Kelly that the method originated with Simpson of Edinburgh. To Tait, however, is undoubtedly due the credit of making it more generally known. However, I will not go into the history of the operation, nor follow up its development as has been so excellently done by Professor Sänger, but will confine myself to the modern operation, as now performed by Tait and others.

First, it must be remembered that this operation is for an old lacerated perineum and not for a recent laceration. Its advantage lies in the fact that absolutely no tissue is removed, and that the operation can consequently be performed over and over again, which, however, judging from Mr. Tait's results, as well as from our own in the hospital here. will seldom be found necessary. In a great number of the cases of Mr. Tait, the perineum has successfully withstood the strain of a second labor. Another advantage is that no stitches enter the vaginal or rectal wall and the danger of a fistula is therefore nil.

The method is applicable to both an incomplete and complete rupture. For the sake of simplicity I will first describe the incomplete rupture.

The instruments required are only a pair of elbow scissors, a long slightly curved needle, a needle holder, silver wire and fine silk; a tenaculum and a pair of artery forceps. No knife is employed.

Tait completes the operation in four minutes; Barnes occupies eight minutes. As we have always operated under an anæsthetic we have made no effort here to work against

The patient is placed on her back, the parts washed and

shaved. A cotton tampon is placed in the rectum to hold back any facal masses not already removed by a clyster

previously employed.

The patient being thoroughly anæstheized, two fingers are inserted into the rectum and the point of the scissors inserted at Λ , Pl. I, it is of an inch, carefully avoiding the rectal and vaginal walls as shown in Pl. II.



Plate I. . . .



Plate 2.

From A to B is then cut a uniform depth ($\frac{5}{8}$ inch) and the



Plate 3.

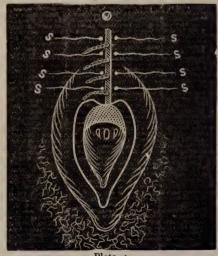


Plate 4.

incision is then continued upward to D. The same process is then repeated on the other side. A flap has now been made and catching the tenaculum at A, this flap is elevated as in Pl. III.

All that now remains is to stitch this flap and the denuded surface, and much stress is laid upon the method of applying the stitches. The needle should be inserted just inside the border of the wound and pressing deeply across, transversely, find exit at a corresponding point on the other side. The upper stitch should be first inserted. Four silver sutures are all that are required. When the parts are brought together and the wires twisted the parts present the appearance as shown in Pl. IV, with the ends of the wires protruding from the line of union. The cutaneous surfaces are then brought together by superficial stitches, placed between the silver sutures (S. S). A small tit-like protruberance is caused by the flap, but this retracts very soon.

For the first three days the urine is drawn with a catheter. On the seventh day the superficial stitches are removed, and on the fourteenth, the wires. There is no difficulty in removing these latter, as might be supposed from their deep position, nor does the procedure interfere with union by first intention, which is the usual result.

The rectal tampon should, of course, have been removed

before the parts are brought together.

The ordinary antiseptic precautions are employed, though we depend mainly upon cleanliness, and the wound is simply dusted with iodoform and a cotton pad used to cover it. There is scarcely any hæmorrhage to be feared, and any small vessel met with can be twisted.

Understanding the operation for an incomplete laceration, it is easy to comprehend which should be adopted for a'complete laceration from the following diagrams:

The cut to the right and left is made as before, and the vertical cuts on either side are extended downwards. The incision now has the form of H instead of [7] as in the previous operation. The upper flap is elevated and stiched

together as described, and the lower flap is pulled downward and stitched together in a similar manner.

When the flaps B. B. are elevated and low-A ered respectively, and A. A. stitched together, the diagram should present the following form:

This operation is useful not alone for a lacerated perineum, but for a prolapse of the posterior A | A vaginal wall. If, however, the prolapse is of the upper third of the vagina, we have found it desirable to perform a posterior colporrhaphy first, and

follow it by the operation.

One must see the results of Tait's perineorrhaphy to appreciate it. I was loth to believe that the perineal body could in any degree be restored by this process which seemed to me to be only superficial in character, but I have no hesitation now in earnestly calling it to the attention of the profession as fulfilling all the indications for which it is intended, and being so simple in character that any general practitioner may employ it.

ART. IV .- Pyogenesis* By HUGH BLAIR, Ex-President Virginia Pharmaceutical Association, etc., Richmond, Va,

If the old woman is asked, What is pus? she will say, "It is matter from a sore." If the chemist is questioned, he will say that it is a "thick, creamy, opaque, yellowwhite fluid, slightly viscid, having a faint odor, alkaline reaction, and a specific gravity of 1,030 to 1,033. It contains from ten to fifteen per cent. of solid matter, of which twothirds are albumen, and the rest fatty matter and salts, such as are found in the blood. On standing, it separates into a dense yellow layer—pus corpuscles—and a clear, supernatent fluid-liquor puris. The reason why this does not coagulate is unknown." (Green's Pathology.)

One of the most interesting points about pus is the fact

[&]amp; Read before Richmond Medical and Surgical Society, June 16th, 1888.

that its formation is prevented by the use of antiseptics; so that amputations are now performed very often, where healing takes place by the first intention, and no pus appears.

Is pus due to bacteria? We do not ask, Is pus due to septon? Prof. John Tyndall, in his celebrated lecture at Glasgow, after stating that he had cut his foot on the Alps, went on to say that "the inflammation increased alarmingly until I was carried ignobly on men's shoulders down the mountain, and transported to Geneva, where I was placed in the best medical hands. On the morning after my arrival in Geneva, Dr. Guatier discovered an abscess in my instep at a distance of five inches from the wound. The two were connected by a channel or sinus, through which he was able to empty the abscess without the application of the lance.

"By what agency was that channel formed? What was it that thus tore asunder the sound tissue of my instep, and kept me for six weeks a prisoner in bed? In the very room where the water-dressing had been removed from my wound, and the goldbeaters' skin applied to it, I opened this year a number of tubes, containing perfectly clear and sweet infusions of fish, flesh and vegetables. These hermetically sealed infusions had been exposed for weeks, both to the sun of the Alps and to the warmth of the kitchen, without showing the slightest turbidity or sign of life. But, two days after they were opened, the greater portion of them swarmed with the bacteria of putrefaction, the germs of which had been contracted from the dust-laden air of the room; and had the pus from my abscess been examined. my memory of its appearance leads me to infer that it would have been equally swarming with these bacteria, and that it was these germs which got into my incautiouslyopened wound. They were the subtle workers that burrowed down my skin, dug the abscess in my instep, and produced effects which might well have proved fatal to me."

Pyogenesis may yet be assigned to a bacterial origin. It is no objection to the theory that pus is found in deep cavi-

ties, excluded from contact with the air. The frequent occurrence of metastatic abscesses is sufficient proof that particles of matter are conveyed to any and all parts of the body.

Mr. W. Watson Cheyne, at the Royal College of Surgeons, recently delivered some lectures on suppuration and septic diseases. In conclusion, he said: "We have at our command a large number of antiseptics which, more or less, answer the purposes required, and it is only by careful attention to the exclusion of these organisms that we can obtain the best results. That we can completely exclude these bacteria from wounds, both at the operation and afterwards, has been ascertained by numerous experiments; and just in proportion as we are successful in so doing, we are, to a like degree, freed from the occurrence of suppuration and septic disease, and can, to a large degree, reckon with confidence on rapid and painless healing of wounds with the least disturbance to the patience."

What is pus? "The older surgeons believed that this duid was formed by the breaking up or disintegration of the solid tissues, or that it was the result of the liquefaction or saponification by the acid products of inflammation. Quesnay and Haller exposed the fallacy of these opinions, and modern pathologists look upon pus as a direct product of inflammation. Pus cells have been shown by recent observers to be modified or degenerated exudation corpuscles, and the fluid in which they float to be of a serous character." So says Mr. Erichsen.

It is now agreed that the inflammation exudation cells are the white corpuscles of the blood which have passed through the coats of the vessels. In severe inflammation, the red corpuscles also pass out of the vessels.

"Dr. W. Addison, in 1842, inferred from his observations that leucocytes passed through the vessel walls, and became pus cells; and in 1846 Dr. Augustus Walter saw them escaping. Both concluded that the escaped corpuseles became pus cells." (Green's *Pathology*.)

Dr. Lionel Beale (The Microscope in Practical Medicine) says: "The pus corpuscle is not formed by the breaking up

of the tissue, and the aggregate of lifeless particles resulting therefrom. Nor is it produced by the precipitation of particles from a clear exudation and their subsequent aggregation to form masses, as Dr. Bennet, of Edinburgh, supposes, Pus, as has been already stated, is a form of living germinal matter, and has descended continuously from normal germinal matter of the body. Virchow has been led to conclude that pus is formed in connective tissue corpuscles and epithelial cells only. But there is little doubt that pus may be derived from any germinal matter in the body. The white corpuscle, the minute masses of germinal matter which I have described as existing in the blood, lymph corpuscles. chyle corpuscles, the masses of germinal matter in the spleen and other ductless glands, those found in connection with the walls of the capillaries, germinal matter of the nerves, muscle, and other tissues of the body, give rise to pus if placed under conditions in which they are freely supplied with pabulum."

Further, on this subject, says the same distinguished author, in his work on Urinary and Renal Disorders: "As to the growth of pus, there is no doubt that lifeless nutrient pabulum passes into the substance of a pus corpuscle, and becomes a part of the living particles of which the pus corpuscle is composed. A portion of the living matter passes away from the general mass, and at length becomes detached and free. These pus corpuscles live and grow and multiply in a medium which contains the substance fitted for their nutrition. But the pus corpuscle does not go on growing indefinitely. Before it reaches the largest size which it may attain, it begins to subdivide into smaller portions. The smallest particle separated, being supplied with nutrient matter, grows and gives rise to new particles in the same manner. These vital changes occur in the same order in the case of the simplest living beings in existence as in the elementary parts of the highest tissues of the highest organisms. In the pus corpuscles we may actually see portions of the living matter in the act of moving away from the general mass, and can see them at length detached and separated."

From the figures often given of pus, the reader would be led to infer that all, or nearly all, the corpuscles are of the same size. Such an inference does not accord with the facts. Pus corpuscles, white and red blood corpuscles, and many other cells vary equally in size. For example, in any specimen of pns there are many corpuscles varying in size from one ten-thousandth to one three-thousandth of an inch. Can any doubt that the smallest of these is living. and might have grown into an ordinary pus corpuscle? And who shall say how small a particle of a living pus corpuscle may be capable of growing and producing millions, if supplied with pabulum? Many of the smaller particles are so light that they may be wafted into the air for a considerable distance. Falling upon a surface favorable for their growth, they grow and multiply. There are facts concerning the origin and transmission of the poison of some contagious diseases which may thus be accounted for"

Pus is a morbid product. It does not belong to physiology; it is pathological. It is always the product of inflammation.

"Later investigations (says Green, in his Pathology) have confirmed Lister's conclusion in 1858—viz., that the essential lesion of inflammation was a change in the vessel-wall resulting from an injury, which increased the friction naturally offered to the passage of the blood, and was a step towards death. There is no detectable structural alteration of the vessel, however. So Cohnheim speaks of the change as molecular, and regards it as possibly chemical in its nature. To cover all that we know of the escape of fluid and corpuscles, it is necessary to assume that the molecular change not only increases the friction between the blood and the vessel-wall, but also that it renders the latter more porous."

In inflammation we have dilatation of the arteriales, in consequence of irritation of the sensory nerve. The arterioles being dilated while the systemic blood pressure is maintained, admits excess of blood to the capillaries. The capillaries cannot dilate proportionally. Accellaration of

blood flow is followed by retardation, because the vessel-wall is altered. Increased local resistance is the cause of retardation, the vessel-wall is altered by molecular change, and so stasis and thrombosis is reached. Normally the vessels permit the escape of the constituents of healthy lymph, but in inflammation the fluid is changed. Albumen and the tendency to coagulate increase, white corpuscles crowd in; red are found later.

After much investigation, it appears that inflammation leads to depression of vitality, degeneration and death, and that no multiplication of tissue elements and no increased activity accompany it. All the functions of the inflamed parts are depressed. All the new cells in the inflamed parts are escaped blood corpuscles. Green says: "Destruction of tissue is due to the damage done to the elements of the part by injury, to abnormal, physical and chemical conditions from exudation, and to imperfect blood supply in the more advanced stages. It is doubtful whether leucocytes actually destroy tissue; perhaps their only function is the removal of parts which are dead."

In suppurative inflammation no lymph forms and vascularizes; no coagulation occurs. "Serous and fibrinous stages often precede the suppurative, showing that they are minor grades of the process." (Green.) Indeed, in inflammation that ends in new growth it is necessary that the inflammation should reach the fibrinous stage, and not to pass on to suppuration. Pus is an aborted cell. It requires a living cell to absorb sloughs or sequestra. "It is said in the books that a bit of bone, even an ivory peg, surrounded by granulation-tissue, will be slowly eroded; but it may be in pus for months without losing weight, and suppuration is not likely to cease until it be removed." (*Ibid.*)

I have attempted nothing original. My task has been to present the latest and most correct views of pyogenesis for the consideration of the Society, and in doing so I have transcribed very largely from living authors.

Very little is said in the books about pus, and what is said is generally the regulation remarks in the Surgeries that come under the head of inflammation. The facts are

few, and the phenomena obscure, and, like all subjects connected with bioplasm, difficult of interpretation. We ask, What is pus? and that takes us back to germinal matter—that is, to protoplasm. And protoplasm takes us to the question, What is life? and if we stop to investigate that subject, we shall be like the idiot who stood on the bank waiting for the stream to exhaust itself.

ART. V.-Quinine Salts—their Solubility and Comparative Richness in Alkaloid. By FREDERIC S. MASON, New Orleans, La.

The very prominent position which the alkaloid discovered by Pelletier has attained in therapeutics, has suggested to the author that experimental tests as to the solubility and comparative richness in alkaloid of commercial salts of quinine found in pharmacy, would be of some practical service to the physician in prescribing.

Quinine is evidently useful in direct proportion to the solubility of the salts employed and modified by the molecular weight of the acidulous radicle with which the quinia is combined; and we believe if this were more generally brought to the notice of the physician, smaller doses might be given of the more soluble salts (at frequent intervals) with better effect than the large doses which sometimes produce unpleasant after effects.

We propose to present briefly and without unnecessary details, some notes made of direct experiments with authentic specimens of the quinine salts obtained from Pelletier's quinine factory (Paris,) such as are used by the profession in elegant little spherical capsules containing each 10 centigrammes.* These soft capsules dehisce at a suture in the middle almost immediately on putting them into tepid water, thus rendering absorption by their rapid solution in the stomach almost immediate.

The experiment performed in a glass of water is interesting. The two sides rapidly parting, disclose the uncom-

^{*}Imported by E. Fougera & Co., New York, each capsule bears the name 'Pelietter.'

bined crystalline powder, which dissolves as soon as stirred up with the required proportion of water.

Quinine Sulphate (medicinal). Solubility 1 in 740 of distilled water at 15°C. Percentage of quinine, 7; percentage of cinchonidine, 4; this salt, which is in long needles, cotton-like in aspect and extremely light, was the first produced by Pelletier in 1820.

Quinine Sulphate (pure). Solubility 1 in 755 of distilled water at 15°C. Percentage of quinine, 73.31 per cent.; in hard needles brilliant, somewhat like magnes. sulph. in appearance.

Quinine Bi-Sulphate. Solubility 1 in 10 of distilled water at 15°C. Percentage of quinine, 59.12; in small prismatic

crystals.

Quinine Hydrochlorate. Solubility 1 in 25 of distilled water at 15°C. Percentage of quinia, 81,71; this pure crystalline salt as made at the Pelletier factory is white and is the richest in alkaloid.

· Quinine Bromhydrate. Solubility 1 in 60 of distilled water at 15°C. Percentage of quinine 76.60; in small needle shaped crystals. This salt is well tolerated by the stomach and partakes of the calming properties of the bromides generally.

Quinine Valerianate. Solubility 1 in 110 of distilled water at 15°C. Percentage of quinine 76.06 per cent.; useful in nervous cases.

Quinine Salicylate. Solubility 1 in 900 of distilled water at 15C. Percentage of quinia 68.79; during the late epidemic of cholera in France, this salt was used with good results, its utility in muscular rheumatism and neuralgia is generally accepted.

Quinine Lactate. Solubility 1 in 3 of distilled water at 15°C. Percentage of quinia 78.26. Pelletier's salt is white and beautifully crystalline.

Remarks:—These percentages are as near as possible to the theoretical quantities required by calculation—example.

Quinine chlorhydrate C_{20} H_{24} N_2 O_2 HCl_2 H_2 O=396.4 theory $\frac{324x100}{396.4}$ =81.73; found 81.71.

In conclusion, we think the more soluble salts, richest in

salkaloid, the chlorhydrate and lactate, whose acidulous radicals are normal constituents of the stomach, deserve a more extensive application in medicine.

Clinical Reports.

Membranous Croup and Diphtheria. By E. L. DETWILER, M. D., Herndon, Fairfax Co., Va.

On the morning of October 29th, 1887, I was called to see the little daughter of Mr. A, age eighteen months. I observed her laboring very much for breath, and making that very characteristic ringing metalic cough. Upon questioning the parents I learned that she had showed signs of croup for about five days, and when I called she had been laboring severely for about twenty-four hours with croup. She was well nourished, very healthy looking, and had never had croup prior to this attack, nor had any of the other seven children suffered from a like complaint.

On making an examination of the throat, I noticed a white ring or band of membrane encircling the larynx, but a long way down, just visible; I also noticed considerable hypertrophy and inflammation of the tonsils. So by the history, appearance of the throat on inspection, and the fact that spasmodic croup was not known in the family, I felt no hesitancy in making a diagnosis of membranous or true croup. At the same time I expressed a doubtful prog-

nosis.

An emetic dose of ipecac (fluid extract) was given, but as no emesis occurred she was next given a four grain dose of yellow subsulphate of mercury (or terpeth mineral), rubbed up with sugar and deposited upon the tongue. It speedily had the desired effect and large quantities of an albuminous, jelly like matter was ejected; but no relief of any consequence was noticed. Full doses of quinine were given, and fresh lime slacked just under the nose with a view to act as a local solvent of the membrane. Ammonium bromidum was also given with a view to quiet the system, and produce rest. And as it is exhaled by the bronchial mucous membrane we hoped it would exert a local effect, as it passed out. Camphor, turpentine, and olive oil, of each equal parts, was rubbed on the throat. It was found necessary to give the emetic twice afterwards; patient breathed a little easier after vomiting, but only for a short time.

And in about twenty hours from the time I was called death

took place, by asphyxia, from what I could learn.

Two days later I was again called to see two of the other children, aged 8 and 14 years respectively, the older of which was suffering quite severely from a sore throat. On examination of the patient I found a temperature of 103° (morning) and pulse 135, great tenderness about the throat, and a very feetid breath; gagging and retching was induced when an attempt was made at ocular examination. When it was finally accomplished it was noticed that the throat and fauces were already in a sloughing condition, and grayish white patches of membrane were over it. There was extreme prostration and depression of the vital powers, and as the membrane was not confined to the tonsils, and showed bare and bleeding surfaces where it had sloughed off, and no normal mucous membrane, I diagnosed it a base of diphtheria.

The other case was similar but altogether milder, so mild

that the child was not even confined to bed.

Treatment of the first case was

Ry. Tinct. ferri chlorid.....gtts. v Quiniæ sulph.....gr. j

Mix. Sig.—Take every hour.

Aque.....q. s ut. ft. 3viij—Mix.

Sig.—Give a teaspoonful every hour after gargling throat

with a little of same alterative prescription.

Also a little sublimated sulphur was to be blown upon the part, sulphurous acid being formed by oxidation, which is a powerful germicide. For food he had milk, eggs (soft boiled), beef essence, and in short as nutritious a diet, and as much as could be given him without exciting disgust for it. He was also allowed a tablespoonful of whiskey every two hours, in milk; and by the evening of the first day I noticed that the pulse had fallen to 120 and the temperature risen to 104°. On next day temperature was 99.4°, and pulse 94; From that day a gradual decline in the temperature was observed, until the fourth day when it was found to be at the normal. Pulse remained weak and thready for some time, but its gain was steady, appetite returned after fever subsided, and patient made a very good recovery.

I would like to call attention to the fact that nothing in the shape of antiphlogistic measures was used, but on the contrary everything the reverse; and notwithstanding, the pulse and temperature both declined under their administration until the normal was reached.

Now what was particularly interesting to me was that there were no other cases of diphtheria anywhere around, nor has any happened since, save another sister of the case described (who lives a couple of miles from home and came to visit the case of croup before the contagious nature of the disease was suspected), who took diphtheria in a mild form. She also recovered. Another sister who lives in the other direction was at home the same time, and also had a sore throat when she returned to her vocation.

I cannot help but think that the disease was caused by some local infection about the place, as the family did not live in the most hygienic surroundings, but rather the reverse. And it also looks to me that the three cases of diphtheria and case of sore throat were contracted from the case of croup, or that the same cause which occasioned croup in the child also operated to produce diphtheria in the other members of the family—a fact it seemed to me, which if proven, would go a long ways toward establishing the identity of membranous croup and diphtheria, or if not identical, at least very closely allied in their etiology, but differing quite considerably in their symptoms and effects.

Dr. Fordyce Barker of New York, states "if the yellow subsulphate of mercury be given early and in quantity sufficient to bring about emesis, scarcely any will die," but it has generally failed in my hands, and I am strongly of the opinion that if we have a real case of true membranous croup we can do but little to save life, unless we resort to tracheotomy, a procedure which might do very well in hospital or city practice, but in country practice and out of the reach of eminent surgeons I think a person would lay himself liable to severe criticism, as popular opinion would cry loudly that the operation was the cause of death, when in reality it only failed (as do most other remedies) to save life. And for my part I think it will seldom indeed succeed, and therefore is hardly a justifiable operation, especially when its failure will perhaps ruin to a great extent the reputation of the performer.

Priginal Translations.

From the German. By M. D. HOGE, JR., M. D., Richmond, Va.

Relations between Syphilis and Progressive Paralysis.

According to Dr. Rieger's observations (Allgemein Zeitschr. f. Psychiatrie—Rundschau, April, 1888,) no belief should be placed in a few statistics when accurate deductions are to be drawn. Among one thousand non-paralytics, forty-five had syphilis. Among one thousand paralytics, four-hundred and thirty-four had at some time in their lives suffered from syphilis; hence one is compelled to believe that there is a definite influence which syphilis exercises upon paralysis. The ratio is about seventeen to one.

Menstruation Produced by Hypnotic Suggestion.

Koljski relates the case of (Petersb. Med. Wochenschr—Rundschau, April, 1888,) of a girl eighteen years old, who was relieved of hystero-epilepsy by hypnotism, but this was followed by irregular menstruation. K. told her that on a certain day and hour it would begin, and it really did occur; the same thing was gone through with a month later with good results, and from that time on she menstruated regularly, which was followed by marked improvement in her general health.

Neuralgia of the Bladder.

Prof. Guyon (Neurolog. Centralbl.—Rundschau, April, 1888,) diagnoses the essential hereditary neuralgia without reference to tabes, cystitis, stone in the bladder, kidney colic or hypochondriasis. Pain comes on while urinating, darting out from the anal region to the glans. The bladder itself upon bimanual examination is not painful; the patient must frequently make water but it is perfectly clear. An exact differential diagnosis must be made between myelitic and cystitic processes. Treatment must be directed to the general nervous condition. A gradual dilatation of the urethra has been employed with great benefit.

Infection of a Child from a Tuberculous Nurse.

Dr. Steigenberger reports the following interesting case. (Pest. Med. Chirurg. Presse.—Rundschau, April, 1888.) A healthy child of six months with a good history on the parents side, was compelled to change its wet nurse four times. Aside from an attack of diarrhea the child thrived well

until about four weeks before Dr. S. saw it. At this time there was a large regular swelling of the right cervical glands. They were at first small and hard with slow growth. During the last week they became painful and skin red. The child was pale, anæmic but otherwise healthy. On questioning the parents they said that the third nurse was discharged because she had lung trouble, had a severe cough and constant expectoration. Two months after her departure the child was attacked as above described. On an examination of some of the glands removed with a sharp spoon tubercle bacilli were found in the mass. The deductions were that the nurse had phthisis and had infected the infant.

Substitute for Cod-Liver Oil-Lipanin.

Professor J. von Merig says (Therapt. Monats—Rundschau, April, 1888,) the advantage that dark cod-liver oil has over the light colored is on account of its free fatty acid; however, even this is a very variable quantity—some specimens containing more free acid than others. Prof. v. M. has brought before the profession a substitute which, aside from its invariableness, is easy of digestion and of a pleasant taste; after a number of experiments it was found that pure olive oil containing 6 per cent. oleic acid answered all the conditions. This product is called Lipanin and the youngest children have taken it for months without any disturbance of the digestive organs.

Action of Strophantus.

Professor Fränkel (Deutsch. Med. Wochensch.—Rundschau, April, 1888,) says the tinct. strophantus is a useful heart tonic, but not stronger than digitalis. Where digitalis fails the action of strophantus is by no means brilliant. Its action in arterio-sclerosis and chronic nephritis is absolutely worthless. It is of use in functional diseases of the heart (alcohol and tobacco.) Its remedial action only appears after twenty-four hours.

For Nervous Headache.

Gorrespondence.

Leprcsy—Its Contagiousness Discussed in Paris Academy of Medicine—Lepers in Egypt—Their Religious Belief.—Tetanus—Its Equine Origin and Contagiousness—Not Suggested by Confederate War.—Confederate Surgeons Association Suggested.—Antipyrine or Analgesine (?) for Migraine—Elixir of Antipyrine—Prof. See the Accredited Discoverer—Professional Fees—Consultations—How Conducted.

15 Rue Caumartin, Paris, July 4, 1888.

To the Editor of the Virginia Medical Monthly:

DEAR SIR: A very interesting discussion is going on in the Academy of Medicine respecting the manner in which

leprosy propagates itself.

Vidal and Cornil, who believe in the contagious nature of the malady, have given some exceedingly interesting facts, or rather, what they allege to be facts, in support of their side of the controversy. According to them, the communicability of leprosy by contagion is established by the following considerations:

1st. The parasitic nature of any disease is per se proof of

its transmissibility by contagion.

2d. The essential microbe of leprosy has been discovered by Hanser, and its existence is admitted by the profession.

3d. Cases are on record in which the propagation of leprosy cannot be explained upon any other theory than that of contagion.

4th. The efficacy of prophylactic measures in controlling

leprosy is conclusive proof of its contagiousness.

Leroy de Méricourt takes the other side of the question, and denies the contagiousness of leprosy. He replies to the arguments of his opponents by challenging them to produce a single instance in which the disease has been reproduced by inoculation; and then adduces the testimony of Drs. Zambuco and Lacaze, both of whom have studied the disease under exceptionally favorable circumstances, and who declare that they have never known a case of leprosy produced by contagion, and that neither the husbands nor the

wives, nor the nurses, nor the immediate families of lepers, contract the disease, although their children inherit it.

It is plain, therefore, that the question at issue is rather one of fact than for argument; and that, taking into account the fallaciousness of human testimony, the discussion of the learned academicians is hardly likely to have a practical result.

It is a fortunate circumstance that the author of Ben Hur has taken the biblical view of this subject, for, otherwise, the world would have been deprived of one of the most interesting and powerful books that the century has produced.

During my residence in Egypt, I frequently encountered lepers in the public streets, and learned with astonishment that they were not segregated from their families and friends. The teachings of the Khoran render its disciples utter fatalists, and, at the same time, inspire them with a profound sympathy for the afflictions of their fellow-Mohammedans. While shrinking from physical pain, they have no fear of death, because convinced that they are powerless to resist the decrees of God, and assured that He has in reserve for the faithful the green fields, and the ministering Houris of Paradise. They regard disease as the visitation of Allah, and believe that they are under a sacred obligation to respect its victims, however loathesome the resulting conditions, or whatever the danger it may threaten. Instead, therefore, of compelling the leper to announce himself by the cry "Unclean! unclean!" and to drag out his miserable life in utter seclusion, they impose no restrictions upon him, and treat him with even greater kindness because of his terrible affliction. In many things Christians might take a lesson from the Muslims, whom they so despise, and surfeit with missionaries; for, according to their lights, they are the most religious people upon the face of the earth.

M. Berger, one of the surgeons of Lariboisière, and known from his advocacy of the "equine origin of tetanus," has recently called the attention of the Academy of Medicine to a circumstance which, in his judgment, proves that the dis-

ease in question may also be transmitted from one person to another—i. e., developed by contagion. A young man, who had been received into the hospital on account of a burn upon the hand, was visited several times by an ostler, and once accompanied him to his stable. Soon afterwards, and very unexpectedly, symptoms of tetanus showed themselves, and finally proved fatal, although his arm was amputated with the hope of arresting the disease. During the progress of the case, another patient, suffering from a contusion of the fingers, was placed in an adjoining bed, and, in a very short time, was attacked with tetanus as well, from which, however, he fortunately recovered under the liberal administration of chloral.

From these data, the surgeon arrives at the conclusions that the first patient contracted tetanus in the stable, and that the second took it from his neighbor. Hence, he infers that the disease is of equine origin, and that it is communicable from one person to another by, what we designate, contagion. Whether the post hoc was in reality the propter hoc, in this instance, it is difficult to decide; but, inasmuch as the theories promulgated are plausible, I will not join issue with M. Berger in regard to them, especially as anything which tends to elucidate the etiology of tetanus—one of the least understood of all subjects within the domain of surgery—possesses a certain value to the profession.

I saw many a poor fellow die of it during the "War between the States," while I stood by ignorant of the true nature of the malady, and powerless to aid him; but I cartainly never suspected an equine origin of any case that came under my observation, or thought of contagion as one of its modes of propagation. I had supposed that vicissitudes of temperature, humidity of the atmosphere, poor hygienic conditions, previous loss of strength from ill-health or fatigue, sparsity of hospital comforts, etc., had much to do with its development. Confederate surgeons observed that whenever a heavy rain-fall, or a marked abatement of temperature, occurred immediately after a battle, they had more cases of tetanus than usual to deal with; but it certainly was not remarked that cavalry soldiers were

specially subject to it, or that it was communicated by one soldier to another. I think, too, that amputation as a remedy for tetanus was generally condemned; certainly my own experience led me to discard it.

Permit me to ask what contributions have been made by Confederate surgeons to the surgical history of the war? It is true that a few of them have reported cases in the publications emanating from the Army Medical Museum at Washington, but, as far as I am informed, an immense majority have remained silent in regard to their experience on the battle-fields, and in the hospitals of the Confederacy. Can nothing be done to rescue from oblivion the brilliant achievements of the physicians of the South during its sanguinary struggle for an independent nationality, and to give the world the benefit of the invaluable lessons which they then acquired?

Why can they not, even now, diminished as their numbers are, and as absorbed as they may be in other things, organize a society for the purposes which I have just indicated, and, likewise, as a means of reviving the ties and associations of the past, and of perpetuating the memories of

their departed, and departing comrades? *

Why cannot Hunter McGuire, E. Burke Haywood, Robert Kinloch, Joseph P. Logan, John S. Lynch, J. McEdden Gaston, Thomas S. Lattimer, Claudius Mastin, Joseph Jones, A. Y. P. Garnett, and Algernon Garnett—all good men, and great physicians—constitute themselves a committee to take this work in hand, and to accomplish it? Such action upon their part would elicit, I am sure, the warmest gratitude of their former comrades, and the cordial approbation of the entire South, where they are universally esteemed and honored.

So far from reviving past animosities and fostering sectional prejudices, such an association would but tend to the development of sentiments of patriotism and fraternity among its numbers by giving them conspicuous positions

^{*}The Association of Confederate Surgeons and Physicians was organized in 1874, with Surgeon-General S. P. Moore, as President. Dr. Hunter McGuire was the second Annual Presideni, but since 1875 we have not heard of the activity of this Association.

in the true surgical history of the war, and causing them to realize that, having helped to make it, they are entitled to participate in the renown which it has won for their country. Besides, we are in reality a united, homogeneous and indivisible nation; and all the glory won by either side is now the common heritage of the American people, without regard to the question of section or of antecedents, and in defiance alike of the wails of despairing fanatics, and the

protests of disappointed demagogues.

The Academy of Medicine, influenced by the anti-German craze which completely possesses the French nation, has re-baptized antipyrine, calling it analgesine instead; but wherefore I cannot explain. Antipyrine has, however, too strong a hold upon the public confidence to render the acceptance of any synonym possible at present. The extent to which it is employed here is incredible. The average French doctor prescribes it for "all the ills that flesh is heir to;" it has become as necessary an article in every lady's boudoir as her perfume-bottle; scarcely a man can be found who has not some of it carefully stored away in his pocket-book; children are raised on it, and cry for it as for their biberons; and, in fact, they all take it, and for all things—but especially for migraine, which, as you know, is pre-eminently the malady of those who indulge in social dissipation. That you may form an idea of the extent to which it is the rage, I will give you an incident as it was told me by the party immediately concerned:

Mrs. P. was dining out recently in the Faubourg St. Germain, when she chanced to mention that she had suffered with headache during the day. Instantly, from the pockets of thirteen of the fifteen guests who were present, antipyrine was produced—in capsules, wafers, powders, and elixirs—and she was compelled to take a dose then and there, notwithstanding her earnest protest, and her assurance of entire relief before starting from home.

Paris is flooded with *Elixirs d'Antipyrine*, each claiming to completely disguise the taste of the drug, and all sweet to excess. To supply the *desideratum* existing in this regard, and as a substitute for the mawkish mixtures so much in

vogue, I have had an elixir prepared in accordance with the following formula, which is excellent in all regards:

R.	Antipyrine		3iii
,	Alcohol	f.	3ss
	Syrup of raspberries	. f.	Ziiss
	Distilled water sufficient for	f.	₹vj

M. S. Dose:—One tablespoonful in a Bordeaux glass of water, repeated pro re nata.

This extravagance in the use of antipyrine is really a tribute to its value as a remedy. It certainly goes straighter to the spot where pain exists, and does its work more effectually after getting there, than any known agent, and that, too, with the advantage of doing no appreciable injury to the system, unless taken in very large doses and for a protracted period.

The French read no foreign books or journals, and as Professor Sée first called their attention to antipyrine, they regard him as its discoverer—an honor which he has has no scruple in accepting, since it adds to his fame and puts money in his purse.

Speaking of money reminds me of the supreme indifference which it is the fashion here to affect in regard to fees. Nothing offends a French physician more than an inquiry in regard to his charges for professional services or for money to be directly paid to him. Although at heart extremely solicitous respecting his fees, he considers it infra dig to discuss them, and he expects every client to take a hint from the Louis conspicuously displayed upon the mantle-piece, and to add his quota to them, before leaving the room. In consultations, it is the duty of the regular physician to obtain the fee-one hundred francs in ordinary medical cases—and then to hand it to the consultant, sealed up in an envelope, in the most quiet manner possible, and never in the presence of the patient or his family. No conversation on the subject is admissible, and the matter is treated as if it were the least important thing in the world,

One excellent custom in connection with consultations prevails here; the regular physician, as well as the consultant, receives an extra fee—usually a double one. This is

preeminently just, as he has to sacrifice all other engagements in order to meet his confrère at an appointed hour, and is necessarily subjected to a longer detention than that required by an ordinary visit.

A a general rule, however, the foreign physicians residing here, avoid consultations with their native colleagues, because the latter-with some honorable exceptions, at the head of whom stands Dr. Charcot—act as if they possessed all the knowledge, and the rules of professional etiquette were made for men less learned and distinguished than themselves. They consult, not with the attending physician, and in private, but with the patient or some member of the family, in the sick room or where the whole household can hear what they have to say respecting the nature of the disease, and its proper mode of treatment. word, they take advantage of the occasion to display their assumed superiority of knowledge, and to make all the capital possible out of the case, without considering in the least degree the rights or the feelings of the luckless stranger who has called them in, believing that in so doing he was to have relations with gentlemen, and to secure the cooperation of honorable colleagues.

Human nature at best has much that is petty and contemptible in its composition, and there seems to be more of it, and of the lowest variety, in many of the so-called *savants* of this metropolis than in any specimens of the *genus homo* which I have encountered in my wanderings, the Fellahden and Bedouins of Egypt not excepted.

As before indicated, there are physicians here—and many of them—who are the souls of honor, honesty and fair dealing, and whose profound learning, consummate skill and broad humanity, combined with that modesty which is one of the unfailing attributes of true merit, render them an honor alike to their profession, to their country and to their generation. With such as these, any man may consider it an honor and a privilege to be associated, and some of the most pleasant and useful hours of my life have been those which were spent in consultations with them.

But I have already too greatly protracted this letter, and

I will bring it to a conclusion, reserving much that I intended to say for another occasion.

I am, very truly and respectfully yours,
EDWARD WARREN-BEY, M. D., C. M., LL. D.

Analyses, Selections, etc.

Genito-Urinary Reflexes.

Dr. J. G. Carpenter, in the American Practitioner and News for May, 1888, contributes an article, in two parts—the first treating of Long Prepuces, and the second Urethral Strictures. Genito-urinary reflexes have been from time to time presented to the profession by Sayre, Trousseau, Black, Waterman, Dittel, and Otis; but the subject has not been properly appreciated by the practitioners at large. of the evil effects from the condition of phymosis are nocturnal enuresis, more or less dribbling by day, balinitis, congregations of smegma, frequent erections, pain in the penis, hyperesthesia of the glans, and clonic spasms of the lower extremities. Circumcision should be done in infancy as a hygienic and prophylactic measure. It is indicated for cleanliness; to prevent nocturnal enuresis; as a prophylactic against gonorrhea, syphilis and cancer; to prevent decomposition of urine retained under the foreskin; as a preventive of infantile paralysis and mental symptoms; to remove a barrier to sterility; it interferes with the nutrition and growth of the glans. Urethral stricture, followed by reflexes, are not uncommon. A case in point was a man whose stricture measured thirteen millimetres: suffered from nephralgia, neuralgia of the testicles and head of the penis, frequent and painful urination, pain in the back and neck, and irritability of mind. The usual internal urethrotomy was done, and the patient was soon restored to perfect health.

Traumatic Tetanus-Recovery.

Dr. J. Glahn, of Louisville, Ky., reports a case of recovery from traumatic tetanus in the *Southwestern Medical Gazette* for May, 1888. A workman accidentally caught his right arm on the radial side, an inch above the elbow, in a machine. When Dr. G. arrived he found the man in a rigid

condition, his jaws locked firmly, and getting at times very violent. The wounded arm was in a bad and neglected It was cleansed with hot water, and cloths, condition. wrung out in hot water, constantly applied. He was put on frequent doses of fifteen grains of bromide of potash to the dose. This was kept up for several days, and, combined with a local salve, the wound healed up rapidly, and the man made a complete recovery.

Doctors' Privileges.

Dr. D. T. Smith's annual oration before the Louisville Medical Society appears in the June 9th, 1888, number of the American Practitioner and News. Scarcely once in a century may circumstances concur when the dangers of the country permit the development of a statesman. But rarer still are the opportunities for one to make for himself a great name in our science. We can scarce find a man among the devotees of the healing art which has an historic reputation outside of the medical profession. Still each in his own sphere has many things to make his life a happy and enviable one. The physician alone enjoys the privilege of burying his mistakes deep under ground. His shortcomings frequently redo and to his honor and profit. It may happen that a patient will come under his care who, if left to nature, might be able in a few days to go about his business, but who, following prescriptions faithfully, may be led so near to the margin of the dark river that he hears his faint foot-falls echo from the other shore All plants that crowned the creative work on the third day were for some good purpose. But we wonder at first to what use can be put the nettle, cockle-burr, the rag-weed, the mullin, and many others; but as science advanced, we soon found that curative virtues lurked behind the thorns and seeming worthlessness.

Tubercular Testes Followed by Meningitis.
Dr. Robert N. Taylor, of Tollesboro, Ky., contributes to the American Practitioner and News of June 9th, 1888, the following: A laborer, 17 years of age, hurt his privates in falling. He found, on examination, his right testicle swollen. Four weeks after the accident he suffered from severe headache, and was treated for neuralgia. Later there was observed marked frontal pain, apathy, contracted pupils, temperature 101°F., pulse slow and irregular, tongue coated, a tumor ize of hazelnut on right testicle. No tuberculosis

in family history, or like deposits in apices of patient's lungs. But on examination, tubercular meningitis was diagnosed, which was speedily followed by death.

How to Make a Post-Mortem.

Dr. E. J. Kempf, of Jasper, Ind., lays down some short directions in the American Practitioner and News, June 13, 1888. General Aphorisms: Make the post mortem as soon as possible after death. The operator needs a long scalpel, a pair of scissors, forceps, large needle, twine, large sponge, saw, chissel and hammer. Have everything ready beforehand, operate carefully and slowly, and do not cut yourself. In a written report describe only what is seen. Proceed in the following order: Brain, spinal cord, thorax, abdomen, and other parts. Brain.—Put subject on his back, and head on a block. Make an incision over the crown, and turn the flaps backward and forward. Saw off the top of the skull. Lift off the top, and examine the dura. Cut the optic commissure roots of nerves and spinal cord as far as possible. Remove the brain, examine the arachnoid membrane, the condition of the blood-vessels and fissures. Turn the brain over, examine the convolutions, and separate the cerebellum from cerebrum. Open the ventricles, beginning with the third, and see if any blood is present. Cut through the hemispheres, and examine substance for softening. If the brain is to be kept for future use, fill the cranium with sand-bag. Spinal Cord.—Body on the face, block under thorax. Make an incision along the spinous processes, dissect aside the skin fascia and muscles. Saw nearly through the laminal in a line with the transverse processes on each side. Lift out the arches with a chissel; cut the nerve roots of the cord; cut it near the medulla oblongata and sacrum; remove it, and examine for injury, blood, or softening. Chest.—Body on the back. Make an incision from commencement of sternum to some point in linea alba; cut through the cartilages on each side the sternum, lift it out, and note position of organs. Take out the heart and lungstogether, with all their attachments. Heart.—Examine the pericardium; cut open the cavities, and see the ventricles and valves. Lungs.—Examine the pleura, inflate, and note perforation. Aneurisms, tumors, etc., within the cavity need attention. Abdomen.—Extend the first median incision to symphisis pubis. Examine first for fluids, serum, blood, or pus; thickening or inflammation of peritoneum. Remove the spleen, note its size, shape, color, density, and

the appearance of the capsule. Lay it open and expose the follicles, trabeculæ and pulp. Examine omentum, small and large intestines and duodenum in situ. Next remove the stomach, pancreas, kidneys, ureters, and bladder. In females, next remove the uterus and its appendages. The liver should now be removed, and carefully examined by inspection and by slitting it.

Attachment of the Ilium to Incision in Valvulus.

Dr. J. McFaden Gaston, of Atlanta, Ga., reports this case to the Southern Medical Record, June, 1888. The family physician, Dr. Murphy, found H. suffering from severe pain in the bowels; a great many household remedies had been tried previous to his arrival without relief. He was given a quarter-grain morphine and a purgative. He slept well for a few hours, but the morphine had to be repeated. The next day an enema of castor oil was given without much benefit. That night he was given thirty-drops tinct. opii and one-half drop croton oil. The opiates later on did not relieve the pain. His bowel was so swelled on the left side that with an aspirator half a gallon of undigested matter was withdrawn. The patient was a vigorous young man, temperature normal and pulse one hundred beats. The diagnosis of obstruction of the bowels having been made and all the usual remedies resorted to, it was decided to perform laparotomy. A quarter grain of morphine was injected, and the A. C. E. mixture administered. The median line was well cleaned, and the incision made from the umbilicus, to the symphisis. Through the opening a portion of the small intestine enormously destented protruded itself; this was covered with warm cloths, and on further examination a volvulus of the ilium within six inches of the cæcal valve was found. The lumen of the canal was agglutinated and completely obliterated on either side of the occlusion; the disintegration was so great that in handling the gut it contents escaped. The only practicable proceeding was ligation and excision of the necrosed tissue. This was done and the cut ends united by iron-dved silk, the abdominal wound dressed antiseptically. The patient lived for ten hours after the operation.

Mind Cure.

The Southern Medical Record, June, 1888, contains an article on this subject, by Dr. S. P. Crawford of Stockton, Cal. Under this head he includes all fanatical isms, spiritual

faith and prayer cures. True medicine is bounded by no contrasted philosophies, but is the sum of all that is true in them. The environments, pathological, physiological and psychological bearings, must be taken in every case of disease. To have but one remedy for all diseases and conditions is nothing more nor less than being a murderous crank. Under this head comes that class of fanatics who profess to cure all diseases through the mind alone. Faith cure and prayer cure are said to be by Divine agency, and mind cure by the power of the mind alone, but the modus operandi is the same in all. It would be interesting to know how many recoveries there were to the number of failures, but of these we never hear. Whatever virtues there may be in the mind, it is incompetent to reach surgical cases, organic or germinal diseases, and never of itself cures anything but purely imaginary or functional disorders. The mind is of invaluable help to the physician in the sick room and should be wrested from the control of charlatans. Belief inspires hope, and hope is a tonic and stimulant; it arouses the flagging energies, equalizes the circulation and aids with certain materials the eliminating powers of the system. Hope and confidence are transitory in their effects; consequently must be enforced by medical agents, except in purely imaginary or functional diseases in which the mind alone effects a cure, and herein lies the seeming mysterious Divine interference. The mind may be manipulated by various means; prayer with the religiously disposed is certain method of producing equanimity of mind. It is not, from a medical standpoint, objective affecting the Divine will, by which it is moved to send some super-natural force in answer to it; it is subjective, acting upon the mind and system through the inspiration of hope and trust. A trust in God, with an intelligent use of the means at our command, and the assurances of success in all honest departments of business, professions and avocations of life.

Enterotomy.

Dr. Edward Von Donhoff, Athens, Ga., gives the following brief account of four cases. (Southern Medical Record,

June, 1888).

Male, age thirty-five, while working on the railroad sustained a strangulation of an old right inguinal region. Patient, semi-conscious, full, rapid pulse, temperature 105° F., stercoraceous vomiting, and suppression of urine. Four hours after admission herniotomy was done and the gut re-

lieved; but too hours later all the symptoms of strangulation having returned, it was decided to resort to laparotomy. An intussusception fourteen inches long was found near cocal valve. A portion of the gut was excised, closed with a modified Lambert suture, the abdominal cavity washed out with a weak, warm solution of salt and water, and the wound dressed antiseptically. With little interruption the patient made a good recovery in five weeks in the hospital.

The next case was that of a strong negro man, who was admitted with a strangulation of an old right inguino-scrotal hernia. The sac was laid open, a coil of the gut nine inches long was found sphacelated. This was removed and treated as in the previous case. Patient in extreme shock survived the operation fourteen hours. Two other cases, one of strangulated femoral hernia, and the other of volvulus, in which laparotomy was performed, recovered.

Social Order.

Dr. W. H. Stilwell, of Humboldt, Tenn., contributes an article to the Memphis Medical Monthly, June, 1888. If christianity in two thousand years has failed to elevate woman to her wished for sphere in the social scale, then we must wait for the operation of natural law. Every mother knows or may know her own child. A yet higher law, the essential existence of family itself, requires that the father shall. know his child. The apparent anomaly is exhibited in the social code whereby woman is held to a rigid and cruel accountability for indiscretions which in man are regarded as: trivial piccadilloes, and condoned even as failings which lean to virtue's side. Man forgives but he never forgets, whereas woman never forgives. It is not her fault that she is thus unfeelingly merciless towards feminine frailty; her sexual constitution, her natural instincts, forbid it to be otherwise. The rational and irresistible conclusion is that not all the wisdom of the world's reformers can avail to disannul or radically change the immutable and essential laws of nature, as manifested and enforced in the social usages of all nations of all the ages.

Hydriodic Acid.

Dr. Wm. C. Wile, of Danbury, Conn., contributes the following to the *Memphis Medical Monthly*, June, 1888. In a severe case of chronic asthma complicated with chronic bronchitis, the patient was put upon the syrup of hydriodic acid, and the effect was all that could be desired; there was

immediate relief of the asthmatic conditions, rapid amelioration of cough, decreased expectoration, becoming thinner in character. She took the remedy for three months, the dose gradually increased up to two teaspoonfuls three times a day. In chronic bronchitis of long standing it has produced excellent results, and it can be given when iodide of potassium cannot for a moment be tolerated. In this affection it is best given in small doses frequently repeated. In lead poisoning and paralysis, this remedy combined with a cathartic and the application of the Faradic current often gives surprising results. In the scrofulous diseases of children, does hydriodic acid give the most marvelous results. Infantile eczema, enlarged glands, cold abscesses, indolent sores, treated with small doses, will prove highly satisfactory. At the suggestion of Dr. Burroll, of New York, the author has tried it in a case of obesity with the effect of decreasing the weight without a single disagreeable symptom. In all the latest stages of syphilis it has yielded most magnificent results. This remedy is not enough understood for the advantages it possesses over all other forms of iodide to render sure and easy to take.

Classification of Tumors.

Dr. W. C. Duke, of Memphis, Tenn., sums up in the Memphis Medical Monthly, June, 1888, as follows: True tumors have their origin in one or more of the germinal layers. The presence of an embryonal matrix is an essential condition to their origin. That the embryonal cells of the said matrix can only proliferate when the adjacent tissues have suffered, or in other words, when there is a loss or reduction of the physiological resistance. That irritation or trauma applied to benign tumors only transforms the same into a malignant one. Even irritation of a common papilloma or wart may give rise to epithelioma. That carcinoma has for its origin invariably an embryonal matrix. That no amount of infection, local trauma, local inflammation or irritation will give rise to a tumor per se.

Double Uterus.

Dr. L. H. Deuring, South Bend, Ind. (Nashville Jour val of Medicine and Surgery, June, 1888,) reports the following: In carefully searching the literature the histories of ninetyseven cases are as follows: Uterus biparititus, seven cases; uterus unicornus, three cases; uterus bicornus, fifty-two cases; uterus single, double neck vagina, two cases; uterus not well developed, ten cases. Vagina divided into two parts, seventy-seven cases; single in five; absent, one; double, fourteen; atresia, six. In ninety-seven cases, fifty children were born, forty-two women pregnant; forty-two natural labors; thirteen difficult ones. Forceps seven; turned one; septum cut, four; rupture of uterus, ten. Of the forty-two women pregnant, fourteen miscarried thirteen times. Twenty-one pregnancies were uterus bicornus; twelve uterus bilocularis.

Pelvic Peritonitis.

Dr. W. C. Fisher, Galveston, Texas, (Daniel's Medical Journal, June, 1888,) read a paper on this subject before the local medical society. Pelvic peritonitis is an inflammation of the peritoneum of the pelvic cavity, and has three stages; first, that of congestion; second, formation of lymph, and third, formation of pus. It is possible in some cases to limit it to the first stage. After the formation of lymph the patient is in a critical condition, and if not stopped here it goes into the third stage, in which, if the pus finds no outlet, death is the result. The peritonitis is often the result either of an extension by contiguity of the reformatory process from the cellular tissue, or the relation between the two is so intimate that they are often attacked at the same time. The chief causes bringing about these conditions are: The ignorance of most young ladies in regard to the menstrual function; abortions in the high bour and low for various reasons; gonorrhea especial in loose women; surgical operations in the pelvic viscera, parturition, injection of fluids into the uterus, traumatic inflammations, displacements, etc. As regarding treatment, opium in some form is the sine qua non. It must be given for its effect and not according to the dosage tables; for the higher fever antipyrin given in large doses brings a quick result. If the peritonitis has become suppurative then an outlet for the pus must be found. If after puncturing it does not come away and we feel sure it is still there, then laparotomy may be resorted to, but certainly before the patient has become moribund. For this manner of procedure we have the authority of Sir Lawson Tait.

Capillary Bronchitis.

Dr. D. A. Walker, of Friendship, Tenn., contributes to the Nashville Journal of Medicine and Surgery, June, 1888, the following: Infant, age five months, contracted a cold; three days later it turned to capillary bronchitis; at times the tem-

perature rose to 103°F, pulse 180, and respiration 50. It varied little from this during the following four days. It was put on

M. Sig.—Teaspoonful every two hours.

To relieve pain Dover's powder and chloral were given. Milk and whiskey were administered by spoon. This case was not given as anything specially remarkable, but only to show that treatment should not be abandoned as long as there is life. Again as much depends on a trained nurse as a most scientific prescription. Antipyretics and arterial sedatives must be used to control fever, opiates to relieve pain.

Much Overlooked Affection.

Dr. E. Meierhof, of New York (Daniel's Texas Medical Journal, June, 1888) discusses the frequency with which adenoid vegetations in the superior vault of the pharynx are met. This is found especially in children at the age of from three to twelve years. They complain of dry hacking cough, respiration by the mouth, accompanied by loud snorting, thick voice, frequently called a nasal tone. On inspection the nasal cavity is filled more or less with mucous. Enlarged tonsils are at times met with; the pillars of the fauces are reddened. Some slight bronchitis, but most always a bent figure. But the most important and difficult part is that which lies in the posterior nares. The examination here cannot be done with a mirror, hence the finger must be educated to a discriminating sense of touch. By sweeping the finger around turbinated hypertrophies, adenoid vegetations, etc., may be detected. The causes for these adenoid growths are due to the numerously repeated congestions of the naso-pharynx. The various instruments such as curette, sharp spoons, spoon-jawed forceps, galvano-cautery points, guillotines, etc., cannot be used on young children; the best plan is to feel for them with the finger, and when found crushed at once with the finger. Of course all cannot be removed at one sitting. The violent hæmorrhage need give to no special claim; it will become less and less after each operation.

Paroxysmal Idiopathic Abdominal Pulsation.

Dr. A. H. McCord, of Rusk, Texas (Daniel's Texas Medical

Journal, June, 1888) reports the following case: A man age fifty-five suffered from intense pain in region of the right kidney and along the course of the ureter; pulse 100, some fever; urine scanty and high colored. After the use of hot baths anodynes and alkaline water he got better. The next day about the same time his pain returned and in addition an abdominal throbbing. This came on regularly for several days, but as the attacks were anticipated by genuine acid stimulants, they were greatly lessened. He lived for some time in a malarious district and had had an attack of remittent fever. The disease is a local neurosis, due to a perturbed innervation of the vaso-motor nerves of the abdominal aorta, a local insanity as it were in the aortic plexus of the sympathetic nervous system. This case shows one of the peculiar manifestations of malaria.

Effect of Cocaine.

Dr. R. H. Harrison, Jr., of Columbus, Texas (Daniel's Texas Medical Journal, June, 1888) says he was called to see a lady after a dentist had injected cocaine in the gum for the removal of a tooth. He found her insensible, pupils dilated, jaws locked, head drawn back, extensions of the arm contracted and hands clenched, respiration forty per minute, pulse full, 80, surface cold. She had then seven convulsions in rapid succession; after the last everything relaxed and she came out very prostrate, but in a few days made a good recovery.

Paralysis Agitans.

The following are the conclusions of an interesting article by Dr. Leonard Weber, of New York city, in the June No. of the Journal of Nervous and Mentat Disease.

1. In the pathology of paralysis agitans we have not come much further than at the time when Parkinson first

described the same.

2. The progressive tremor, while the patient is awake and the muscles are passive, and the progressive motor weakness, are as yet the pathognomic symptoms, while the absence of both the intention-tremor and the contractures of spastic paralysis distinguishes it from disseminated sclerosis.

3. In the etiology of two of my cases an hereditary element can be proved; but emotional influences and long exposure to damp cold appear to be the most potent excitors

of the disease.

4. In the fully developed stage of paralysis agitans the

patients often suffer greatly by neuralgias and otherwise, and need our help as much as those who may be afflicted with more malignant disease. Opiates afford no relief, and are contra-indicated according to common experience. Hyoscyamin combined with tonics is praised highly by many authors. Antipyrin in 15 to 20 gr. doses, and particularly paraldehyde in 5ss. doses at bedtime, have proved quite efficacious in my hands to alleviate part of the sufferings of these invalids.

The Murdock Liquid Food Company.

In a letter from Boston to the "Journal of the American Medical Association," April 21st, the writer says that there has been considerable interest in medical circles in his vicinity over a discussion in some of the secular journals about a certain food preparation manufactured in Boston. Believing that this interest is not confined to the Hub alone, perhaps a few words may be written of interest to those more or less remote from the centre of action. We refer, of course, to the Murdock Liquid Food Company, of which the principal, Mr. Murdock, is the active agent in maintaining for over a year a hospital in the building devoted to the manufacture of their food preparations, the latest of which is "Food Suppositories." This, the "Free Surgical Hospital for Women," is apparently the climax of Mr. Murdock's charity, liberality, and ambition, following his "West End Boys' Home" and "Infant Hospital."

Of the merits of the food as such, we will make no remark, beyond stating that it has been commented upon in

a late number of the "Boston Journal of Health."

The combined hospital will accommodate about 150 patients. Dr. E. W. Cushing has charge of the regular side, and Dr. Packard of the Homeopathic. It was in this hospital that Dr. Martin, of Berlin, operated while in Boston, performing his operation of removal of the uterus through

the vagina.

The whole thing has been looked upon as not exactly the proper thing; still, nothing was done, and things simply took their own proper course, till the "Boston Journal of Health," in a series of articles exposing fraudulent and deceptive foods and medicines, took up "Murdock's Liquid Food" among the number, exposing the falsity of the preparation, composition, and profit in a lengthy article. Mr. Murdock then saw fit to answer this, stating why he thought the article had been written, and denying some of the state-

ments, making quite a breezy article. To this the "Journal" replies only in stronger terms, denouncing in emphatic language the preparation, and replying to some of Mr. Murdock's statements or rather mis-statements; things were get-

ting interesting.

In the meantime Dr. Marcy, who had severed his connection some time previously to any thought of the discussion, published in the "Boston Medical and Surgical Journal" a card stating his previous withdrawal from the Murdock Hospital, and giving as his reasons for so doing that the Hospital was not acting up to its agreement, in regard to running and management of the Hospital. Immediately Mr. Murdock replied in the following number of the same journal, contradicting flatly some of Dr. Marcy's statements, and referring to letters of the Council of Ethics of Massachusetts Medical Society, in commendation of the enterprise, which in the next issue of the "Journal" was flatly contradicted by the Council, thus leaving the way open for Dr. Cushing to show the letter which they claim he has not.

Here the matter rested, and interest is still maintained as to the outcome. Mr. Murdock has very much retracted and modified his advertisement in the daily papers, but probably, with the means at his disposal, among which may be reckoned the "Annals of Gynæcology" and the Hospital, will endeavor to keep before the public the merits of his food preparations, while the "Journal of Health" intends pushing its exposé, and bring the the whole thing plainly and truthfully in its proper light, along with others, the latest being Scotch Oats Essence.

No. 1.

As soon as the above letter became known to Mr. Murdock, he addressed the following to the Editor of the "Journal of the American Medical Association."

Boston, April 23, 1888.

DEAR SIR,—I ask the use of your columns to reply to your correspondent from Boston, in your issue of April 21st. Allow me to thank him for the information he gave that was accurate, and allow me to correct his errors, a thing which I know you and he will be pleased to have me do.

My hospitals have been open and in operation since April 18, 1883, and have admitted patients every day since. When first opened I had to use such buildings as I could command, and many looked at it as an experiment, being in doubt if the profession would approve of it. When I found that they did indorse my efforts by sending me pa-

tients, I then built my present building, 175x120 feet, five stories high, and assigned the two upper stories to my hospitals, which have no connection with my works or with each other. The Homeopathic and Regular entrances are

separate, and fire-proof.

In relation to the attack of the journal mentioned, for my defence, I quote from it: "The information was obtained from a discharged laborer." Did you ever know a person to give a part or a whole of his business to a laborer? If so, why I am not the man. From the second article I quote: "We sent it to our attorney before publishing it." Do you wish to know any more of the paper or writer? The Medical Press said, "No"; as no medical journal would copy it.

I think when I advertised to the world the good which has been done in my hospitals, my pride receives more satisfaction from the suffering women whom I have released from, in many cases, worse than death, as many were dying by inches. I can prove that over one thousand women have been restored to health in my present hospital in eigh-

teen months.

Where is the physician in the whole world who would refuse to send suffering women, with or without money, for treatment? The treatment to all is free as far as I am concerned. Physicians are satisfied, as I have had patients sent by them from all parts of the United States and from the Provinces. The condition in which they returned home was so satisfactory, and the demands for admission were so numerous, that I was obliged to build two new wards and to equip two laboratories. Our weekly clinics now number over fifty physicians. Am I not worthy of credit?

I will close by inviting you or any member of your Journal or Association, or a committee from one or both, to visit my hospitals and works. Then you will realize what I have done and am doing. This offer was also made you

July, 1887, and all bills would be paid.

Yours respectfully, ALBERT I. MURDOCK,
Proprietor of Murdock Liquid Food Co.

No. 2.

After waiting a due length of time, Mr. Murdock addressed the following letter to Dr. N. S. Davis, Editor of the American Medical Association Journal:—

Boston, May 13, 1888.

Dear Sir,—I am surprised at your not publishing my reply to the letter from your correspondent "W.," as his

signature was adopted to throw mistrust on two of the best surgeons in Boston. One of them had trouble with Dr. Marcy at the Chicago meeting. If not so, how could Dr. Nash be represented by "W." unless it was reversed, and should be "M," as he was lately the assistant of Dr. Henry O. Marcy, of Boston, and I defended myself from Dr. Marcy's attack on me in the "Boston Medical and Surgical Journal," by his own letters to me, from which he could not reply, and was disgraced. Now, Doctor, do you think the members of the American Medical Association would approve of your lending the columns of the "Journal" to attack a man who is as well known as I am by them and yourself with a refusal of your columns to me to defend my character and works.

Now, please review our relations, and see who is responsible for this trouble.

We have never had an interview, and no correspondence from me. After being solicited two years, I gave you my advertisement, and always remitted on receipt of bills.

My Food ranks higher to-day with the profession than ever, as they use more of it, it being reliable, and all made by myself, and the last bottle by the same formula as the first bottle made eight years ago. I pride myself that there is no change in my character. I have never had any trouble with the Medical Press, and have always been respected by them with your exception, and this I was not aware of until July last, when Dr. Marcy told me that you told him that my advertisement could not be renewed when it expired.

This you thought better of, as after that date you gave me your best pages before or after reading-matter for no extra cost. On receipt of your first bill I advised you to cancel my advertisement. Since that date I have had advices from you twice asking for my advertisement. Since then have received letters from you twice asking for my advertisements

for your special issue for the late convention.

How do these facts look combined with your refusal to publish or investigate my defence? I think it looks about the same as the position taken by the monthly that made the attack when I refused to advertise with them, or by letting them write an article on my Hospital and taking a given number of their paper to pay for it, which I declined, but did show them through my work and Hospital. After that they black-mailed me.

This is not personal, as I have a high respect for you as a

man. I know that other parties have been instrumental in using your columns without second thought on your part, owing to their reputed high standing, to compromise us both. Enclosed find stamp and envelope, and please advise me by return mail, if you will publish my letter of April 23, 1888.

Yours respectfully, Albert L. Murdock,

Proprietor of Murdock's Liquid Food Co., Boston.

65 RANDOLPH STREET, CHICAGO, ILL., May 17, 1888.

ALBERT L. MURDOCK:-

DEAR SIR,—Your letter of May 11th is received. I have not yet, and do not intend in the future, to publish your previous letter, simply because it did not specify nor refute or correct a single misrepresentation alleged to have been made by the correspondent "W.," but was throughout an eulogy of your Hospitals and Liquid Food well adapted for an advertisement. Besides, almost simultaneous with your letter I received one from Dr. E. W. Cushing, in reply to the same correspondent "W.," in which he pointed out and replied to the alleged misrepresentations fully, and I promptly published it in the "Journal." Having thus given both sides equal privileges, there the matter must stop. Personally, I have never written you a letter before, neither have I ever requested the agent of the advertising department of the "Journal," Mr. White, to write or solicit an advertisement from you. Whatever he has done has been without my knowledge or prompting, and in the line of his business. Respectfully yours,

N. S. Davis.

Superstition, and the Influence of the Mind upon the Body.

Because it is historically instructive to many of the young members of the profession, and interesting reading to many others of our readers, we make lengthy excerpts from the address of Dr. W. R. Amick, of Cincinnati, delivered at the First Annual Commencement of the Woman's Medical College of Cincinnati. The address in full appears in the Cincinnati Lancet-Clinic, July 7th:

When science was quite young, philosophers, like poets, were a very imaginative set of people. All of the discoveries that were promulgated were mingled with the marvellous. As a result of this we have the wonderful secrets of Albertus Magnus; the Natural Magic of Baptista Porta; the Demones of Cornelius Agrippa; the Elixir of Life of Van Helmont,

and the Fairy of Paracelsus.

It would be a monumental task to locate the beginning of

quackery in medicine, but one of the most renowned in the long ago was Paracelsus. He boasted his power of making man immortal, yet he died at the age of 48. He is sometimes called Theophrastus Bombastus Paracelsus. Naturally intuitive, he obtained the principal portion of his knowledge from travelling in various countries and consulting monks, conjurors, barber surgeons, old women, and all persons having a knowledge of the black art, secret remedies, etc. He was professor of medicine at Basle, but became celebrated through a secret nostrum called azoth, which he claimed as the philosopher's stone—the therapeutical panacea—the elixir or tincture of life. In his modest way he called himself the "Monarch of Physicians," and pleasantly stated that the hair on the back of his head knew more than all the authors combined. He mildly intimated that the clasps on his shoes knew more than Galen or Avicenna, and kindly said that his beard possessed more experience than the entire Academy of Basle. With all this innate modesty he was endowed with a liberal degree of boldness, and at his first lecture in the University of Basle he burned the writings of Galen and Avicenna before the class. Notwithstanding all these little eccentricities, he was a man of great ability and did much towards advancing chemical knowledge, especially in its application to medicine.

The study of alchemy developed the first lessons in chemistry, its principal object being the transmutation of the baser metals into gold. Suidas, 800 years ago, defined chemistry as "the preparation of silver and gold." The language of the alchemist was enigmatical and obscure, while the science and all of its necessary concomitants were mysterious, and were conducted with the greatest secrecy.

It is common to ascribe the introduction of alchemy to Pythagoras, or rather to Hermes, and it is frequently called the hermetical science. The alchemists intended by their art to convert all of the common metals into gold and silver, furnish a remedy for all diseases, and prolong human life

indefinitely.

The most celebrated ancient alchemists were Albertus Magnus, Roger Bacon, Raymond Lully, Arnoldus de Villa Nova, John Isaac Hollandus, Basil Valentine, Paracelsus, and Van Helmont. Paracelsus, in his search after this chimerical enchantment, investigated the action of acids upon metals; from this various preparations were made, and this principle is utilized at the present time in many pharmaceutical preparations.

"Elias Ashmole, who styled himself Mercuriophilus Anglicus, states that his adopted father bequeathed to him, in syllables, the true matter of the philosopher's stone as a legacy—by which, as D'Israeli says, we learn that a miserable wretch knew the art of making gold, yet always lived a beggar, and that Ashmole imagined he was really in possession of the syllable of a secret. Ashmole always spoke with great caution about the arca arcanorum. He also describes the mineral stone, the vegetable stone, the magic stone, and the angelical stone. Prior to his description he very kindly informs us that 'incredulity is given to the world as a punishment.'

"The mineral stone has the power of transmuting any imperfect earthy matter into its utmost degree of perfection. It will convert the basest of metals into gold and silver, flints into all manner of precious stones-such as rubies, sapphires, emeralds, diamonds, etc. By means of the vegetable stone Abraham, Moses and Solomon wrought many wonders. The nature of man, beasts, fowls, fishes, all kinds of trees, plants, flowers, etc., may by this stone be made to grow, flourish and bear fruit, increase in color, odor, etc., when, where, and at any season of the year that its possessor may choose. The magical or prophetic stone makes a strict inquisition, discovers any person in any part of the universe, and enables you to understand the language of the lower animals. The angelical stone can neither be felt, seen nor weighed, but it can be tasted. It contains a divine power, celestial and invisible, and endows the possessor with divine gifts. It affords the apparition of angels and gives a power of conversing with them in dreams and revelation, nor dare any evil spirit approach the place where it is."

We are told (in mythology) that Melampus was the first mortal endowed with prophetic powers. In front of his house stood an oak tree in which was a serpent's nest. The servants killed the old serpents, but Melampus took care of the young ones. One day, while he was asleep under the oak tree, the serpents licked his ears with their tongues. When he awoke he was surprised and astonished to find that he understood the language of birds and creeping animals. This knowledge endowed him with the power of divination; he foretold future events and became a renowned soothsayer. From this story of Melampus, no doubt, arose the superstition about the magical or prophetic stone. With this stone in their possession they imagined they could be

come as great seers as their illustrious predecessor.

Arnoldus de Villa Nova, a celebrated physician of the thirteenth century, in his day was a noted alchemist and astrologer. He entertained the delusion that he had discovered the secret of the transmutation of metals into gold. By his astrological acumen he predicted the destruction of the world in 1335. Nova's alchemical investigations were productive of many advantages, and chemistry is indebted to him for the discovery of sulphuric, muriatic and nitric acids.

Dr. Christopher Girtanner prophesied that in the nineteenth century every chemist and every artist will know how to make the precious metals. He states that cooking utensils will be made of silver, and even of gold, which will contribute more than anything else to prolong life, poisoned at the present time by the oxides of copper, lead and tin, which we take daily with our food.

"The soul of the world is not confined, nor the celestial influence limited, but can communicate their virtues to anything artificially made as well as naturally generated." Talismans may therefore be said to have taken their origin from a belief that medicinal substances bore upon their external surface the powers or virtues transmitted to them by plane-

tary influence.

An ancient idea prevailed that there was a connection between the property and color of a substance. White was regarded as cooling or refrigerant; red as warming or hot; hence medicinal substances were classified as cold or hot. Red flowers were given for disorders of the circulatory system, and yellow for hepatic derangement. In small-pox everything in the room was red, even to the bed coverings, and red fruit or berries were placed in everything that the patient (victim) drank.

Frascastorius was a physician and a poet, and located the cause of diseases in the heavens. He considered that contagious diseases and malignant influences were caused by cer-

tain positions of the celestial bodies.

Kircher contends that contagious diseases had always prevailed when Mars and Saturn were in conjunction. From this he inferred that these planets emitted mephitic exhalations which infected the air and the inhabitants of the earth. At the same time millions of animalculæ were generated, and then such diseases as cholera, small-pox, plague, etc., became inevitable. From this it would seem that Kircher had anticipated Koch in the germ theory of disease.

Mr. Fraser states that the natives of Khorasan attribute

the ravages of cholera that decimated their country to the

influence of the star Canopus.

Burton informs us that St. John's wort, gathered on a Friday in the horn of Jupiter (about the full moon in July), and hung around the neck, will "mightily help melancholy and drive away fantastical spirits."

Galen states that all animals born when the moon is falciform are weak, feeble and short-lived, while those born at

the full are the reverse.

Ashmole declares physic to be a "divine science, even God's theology, for the Almighty wrote his scriptures in that

language before he made Adam to read it."

Pythagoras considered numbers as the essence and principle of all things. The monad or unit, which can be compared to the cell, he regarded as the source of all numbers. Two was imperfect, and the cause of increase and division, corresponding to the division of the cells. Three was called the number of the whole, because it had a beginning, a middle, and an end. Four, as it represents a square, is in the highest degree perfect; and ten, as comprehending all musical and arithmetical proportion, and denotes the system of the world.

"As wax is stamped with certain figures, then melted, then stamped anew with others, yet is always the same wax," so Pythagoras claimed it was with the soul, being always the same, yet wearing at different times different forms. This is the doctrine of metempsychosis or transmigration. "The relation of the notes of the musical scale to numbers, whereby harmony results from vibrations in equal times, and discord from the reverse, led Pythagoras to apply the word harmony to the visible creation, meaning by it the just adaptation of parts to each other."

Fabian Withers informs us that diseases that many physicians could not cure have readily yielded to one simple herb in the hands of an astronomer who observed the mov-

ing of the signs.

Superstition is the child of fear. In savage nations the "medicine men" are all conjurors and wizards—persons supposed to be gifted either with divine or demoniacal natures. Incantations, sorcery and jugglery, engrafted often upon enthusiasm and ignorance, took the place of science, to which they were entire strangers. Anything that they did not comprehend they assigned to an invisible power.

In the early and superstitious ages diseases were regarded as inflictions of the divine vengeance, and means were

sought to appease the anger of the gods and mitigate the celestial wrath. From this idea arose the appeals to oracles, divination and magic in connection with medicine.

"Hippocrates was the first physician to boldly declare that no disease whatever came from the gods, but owed its origin

to its own natural and manifest cause."

Even the learned Celsus was not free from a superstitious

tincture of the origin of diseases.

The Egyptians divided the body into thirty-six parts, and they believed each part to be under the especial care of one of the decans or aerial demons who presided over the triple division of the twelve signs. When a person was sick a cure was effected by invoking the aid of the demon who presided over that part of the body in which the disease was located. Ignorance was covered up by mystery, and superstition usurped the place of knowledge. Hence arose the employment of charms, talismans, amulets, relics, etc. Rafenscroft makes Trickmore as a physician say, "Let the number of his bleedings be odd, numero Deus impare gaudet." (God delights in odd numbers.)

The number seven has in all ages been considered as a remarkable number, and is supposed to contain great mystery and power. Seven is regarded as the perfect number, because in that number of days God perfected the work of creation. There was the seventh consecrated year of the jubilee; the clean beasts were admitted to the ark by sevens; the seven lean and the seven fat kine; the seven years of wheat in the dream of Pharaoh; the seven branches in the golden candlestick; the seven priests who with their trumpets encompassed Jericho seven times. In the New Testament we read of the seven loaves and the seven baskets of fragments that were left. In Revelation there is mention made of the seven churches in Asia, seven spirits before the throne, seven stars, seven kings, seven golden candlesticks, seven seals, seven thunders, seven trumpets, seven angels, seven mountains, seven golden vials, seven last plagues, the lamb with seven horns and seven eyes, the dragon with seven heads and seven crowns, and the seven lamps of fire. Joseph mourned seven days for Jacob; Elisha sent Naaman the leper to wash seven times in the waters of Jordan. "The sluggard is wiser in his own conceit than seven men that render a reason." The Sabians believed that the earth was governed and fructified by seven planets, and performed their devotions seven times a day.

Magic was a science in which the Egyptians excelled. Its

attainment was esteemed the highest exertion of the human intellect. Some imagined that magic exceeded human invention, and they pretended that the angels who fell in love with the antediluvian women taught it, and that the essential principles were preserved by Ham after the deluge, and that he communicated them to his son Mizraim.

Ornithomancy was a popular way of searching into the future. Mohammed had holy pigeons which came to his ears and conversed with him about events that were to take

place in the future.

Catoptromancy was a species of divination performed by the aid of a mirror. The mirror was let down into a fountain before the temple of Ceres, when the form of a face could be seen reflected from the glass. If the features were ghastly, pale and cadaveric, it signified that the sick person would die; if the features looked fresh, healthy and comely, then the sufferer would get well.

If the cat sneeze or cough, nothing is more certain than

that one person at least in the house will have a cold.

If the right eye itches, good luck is expected; and when

the left eye waters, misfortune is looked for.

Petroselinum sativum, wolfsbane, asphenium scolopendrium and fuligo ligni were frequently used in the preparation of witches' ointment; and so were sisymbrium nasturtium, sanguis muridæ, oleum solani nigri, etc. A witch rubbed all over with either of these unguents could skim through the air on a moonlight night, singing, dancing, and

otherwise making merry with her companions.

Among the Sumatrans the practice of medicine is carried on by old men and women, and they endeavor to collect a fee in advance by saying that they wish to purchase a suitable charm to fit the emergencies of the case. A charm is a wonderful piece of psychical mechanism. It may contain the magnetic force of the celestial inhabitants, or it may be saturated with mephitic vapors from Tartarus; it may glide like a fairy in the night, or it may rumble along like the Juggernaut of death; it may contain the elixir that will restore the faded bloom to the cheeks of the invalid, or it may possess a lethal principle that will act like a vampire upon its victim. It is so strong that it could not be bound by the chain of Gleipnir, and so far-reaching that, like the Midgard serpent, it encompasseth the earth. It is more powerful than Thor, yet as subtle and deceptive as the illusions of Utgard-Loki. In addition to possessing all of these wonderful qualities, it contains the inherent power of throwing them off like emanations and transferring them to the

person having it in his possession.

The Sumatran charms generally consisted of long, narrow strips of paper, with various inscriptions and fanciful drawings upon them. The following is a positive remedy for ague: "When Christ saw the cross he trembled and shaked; and they said unto him, 'Hast thou the ague?' And he said unto them, 'I have neither ague or fever;' and whosoever bear these words, either in writing or mind, shall never be troubled with ague or fever. So help thy servants, O Lord, who put their trust in thee."

Jerom Merolla de Sorrento, in his "Voyage to Congo," mentions the foot of the elk as a certain remedy for epilepsy. The way to find in which foot this virtue is located is to knock the animal down, when he will immediately lift up the medicinal leg to scratch his ear. You must be ready to cut it off immediately, and you will find an infallible remedy for the falling sickness hermetically sealed up in his

claws.

There is a little animal that can be seen hopping around in the woods and thickets every day. It is as innocent as it is harmless, yet in its meanderings it is storing up a subtle yet powerful force that may harmonize the discords and relieve many of the disappointments incident to humanity, according to the philosophy of the Voodoo Hoodooist and his rabbit-foot.

We are also informed that a silver ring will cure fits, which is made of five sixpences, collected from five different bachelors, to be conveyed by the hand of a bachelor to a smith that is a bachelor. The bachelor who solicits the rings must not state for what purpose or by whom they are wanted.

A rope which has seen service on the gallows if tied about the head will cure headache.

Pestilential diseases have always been regarded as punishments inflicted upon mankind for their wickedness, and we are not surprised that charms and amulets have been used to avert them. Astrologers attribute the plague to a conjunction of Saturn and Jupiter in Libra, or Saturn and the moon in Scorpio.

Pongueville, in his "Travels in the Morea," gives an interesting account of the plague as it appeared in Constantinople. The natives believed it to be an emanation of the celestial vengeance and personified it as follows: "The evil spirit, or cacodaimon, has been seen to glide along the roofs.

No one dares to doubt the assertion. He is a decrepit object, covered with funeral shreds, and has been heard to call by their names those whom he intended to cut off from the number of the living. Nocturnal music and murmuring voices have been heard in the air in the darkest nights, and phantoms have been seen in solitary places near the cemeteries. Strange dogs have howled in a dismal manner, and their voices have been terrifically re-echoed along the deserted streets." A native of Naupli stated, "You must take care not to answer if you hear yourself called in the night; like Ulysses, you will sometimes be attracted by symphonies possessing the ravishing and attractive enchantment of a siren; do not listen to them, but cover yourself over in bed, for it is the decrepit demon—that is, the plague—which knocks at your door."

The following was found in Elias Ashmole's diary: "I took early in the morning a good dose of elixir, and hung three spiders about my neck and drove my ague away. *Deo gratias*." A great many people take their elixir in the evening and see spiders hanging around on the wall at night.

Snake-stones were obtained originally in Java, and were supposed by their absorbent power to extract the poison from the wound by placing it over the part that was bitten.

The effect of talismans, amulets, charms, etc., can be ascribed only to the influence of the mind over the body. If they have been successful in curing or warding off diseases, it is simply through the operations of the imagination, and in those whose diseases could come from the emotions or a pathological condition of the nervous system. The effect of fear upon the system is demonstrated when you have been suffering for hours from a violent tooth-ache, and at last conclude to go to the dentist and have the offending member extracted. By the time you arrive at his office the pain is gone, and you doubt the propriety of having the tooth removed. When you get home you find the pain is 'there also, and it welcomes your return with a few extra twinges to make up for the time lost while you were away.

Medical men frequently meet with extraordinary changes produced upon the body from sudden and violent agitations of the mind. A violent fit of anger has been known to cause jaundice almost instantaneously, and it has occurred within twenty-four hours after the receipt of bad news or the occurrence of unexpected severe financial losses. The hair which was black as jet may lose its color in a few hours

and turn gray or white. Borrelli gives an instance of a French gentleman, who, upon being thrown into prison, was so powerfully affected by fear, that his hair turned completely to a gray in one night. He was released and his hair recovered its normal color. Don Diego Osorio, being in love with a young lady of the court, prevailed upon her for a conference in the king's garden. He was caught, and, as it was capital punishment to be found in that place, he was condemned to die. He was so terrified at hearing this sentence that his hair turned gray during the night. The gaoler related the occurrence to King Ferdinand as a prodigy, who thereupon pardoned him, saving he had been sufficiently punished. "A nobleman of the Roman court was detected in an intrigue, cast into prison, and sentenced to be decapitated on the morrow. When brought before the Emperor Cæsar he was so changed by the fear of death that his identity was questioned—the comeliness and beauty of his face having disappeared, his countenance like a dead man's his hair and beard turned gray, and in all respects so changed that the Emperor caused a strict examination to be made, thinking that the change had been produced by artificial means. This proved not to be the case, and the Emperor, moved to pity, pardoned him."

A girl in the vicinity of Wurzburg, after having been deaf for several years, instantly recovered her hearing after

being told of the sudden death of her father.

Dr. Boerhaave prevented imitative epilepsy by threatening to brand the next one affected, with a red-hot iron. Dr. Scott mentions the case of a boy who had a number of epileptic attacks, but a threat to apply a red-hot iron to his feet at the next occurrence prevented a return of the disease.

Fiemes mentions an instance of a culprit, who was taken out, as he supposed, to be executed. A cap was pulled down over his eyes and a cold wet cloth placed quickly around his neck, when he fell down dead under the supposition that he had been decapitated. Charron speaks of a similar case: A criminal had his eyes covered to be put to death; a pardon was received at this juncture, and his eyes were uncovered, when it was discovered that he was dead. Dr. Bateman records the case of a woman, in previous good health, who was thrown into a violent state of fright and alarm by discovering, one evening, that she had lost her little store of money, the saving of many years of hard labor. The next morning she was anasarcous from head to foot. Dr. Crowther saw a case of tetanus induced by terror on be-

holding a spectral illusion. Van Swieten mentions the case of a boy attacked with epilepsy, from a dog jumping on him. Afterward, the sight of a large dog, or the barking of

one, brought on a paroxysm.

Excessive joy has been known to occasion death quite as frequently as fear. Valerius Maximus relates the case of two women who died from joy on seeing their sons return safely from battle. One died while embracing her son; the other was suddenly surprised by the sight of her son while she was deeply lamenting his supposed death. Sophocles, at an advanced age, yet in full possession of his intellectual powers, composed a tragedy, which was crowned with such success that he died from joy. Fear has developed the symptoms of hydrophobia in numerous instances, and cholera has been produced from the same fertile source.

In the majority of instances where persons have died suddenly as the result of a strong impulse or emotion from the mind upon the body, the post-mortem has revealed a diseased condition of the heart or the blood-vessels. Excessive fear, anger, joy and grief produces an excitement of the mind which is frequently the cause of an attack of palpitation of the heart, and the action of the latter, at such times, may become very violent. As a combined result of the impression upon the nervous system and the violent and excessive action of the heart, the latter may become exhausted and fail to act. Again, the large volume of blood thrown into the arterial system causes a decided increase in the tension, and this increased intra-capillary pressure may be sufficient to rupture some of the smaller blood-vessels in the brain, and the subject dies of apoplexy. A powerful mental emotion may cause a sudden depression of all of the functions of the body, and, as a result of this shock to the system, there may be a sudden failure of the heart. person may remain in a state of suspended animation or syncope for some time, and then the heart gathers up the thread that Atropos had cut, and gradually the functions are resumed again. On the other hand, there may be a sudden and complete cessation of all of the vital functions, and then death takes place immediately.

The influence of the mind over the body cannot be described any better than in relating the case of Colonel Townshend, given by Dr. Cheyne. He was attended by Dr. Cheyne, Dr. Baynard and Mr. Skrine. These gentlemen were sent for one morning to witness a singular phenomenon. Mr. Townshend told them that for some time he had observed

an odd sensation, by which, if he composed himself, he could die or expire when he pleased, and by an effort come to life again. The medical attendants were averse, in his weak state—as he was greatly emaciated by a chronic nephritic disease—to witness the experiment. He insisted upon it, and the following is Dr. Chevne's account: "We all three felt the pulse first; it was distinct, though small and thready. and his heart had its usual beating. He composed himself on his back, and lay in a still posture for some time. While I held his right hand, Dr. Baynard laid his hand upon his heart, and Mr. Skrine held a clean looking-glass to his mouth. I found his pulse sinking gradually till, at last, I could not feel any by the most exact and nicest touch. Dr. Baynard could not feel the least motion in his heart, nor Mr. Skrine the soil of breath on the bright mirror he held to his mouth. Then each of us, by turns, examined his arm, heart and breath, but could not, by the nicest scrutiny. discover the least symptom of life in him. We reasoned a long time about this odd appearance as well as we could, and all of us, judging it inexplicable and unaccountable, and finding he still continued in that condition, we began to conclude that he had indeed carried the experiment too far, and at last were satisfied that he was actually dead, and we were just ready to leave him. As we were going away we observed some motion about the body, and upon examination, found his pulse and the motion of the heart gradually returning. He began to breathe gently and speak softly. We were astonished to the last degree at this unexpected change, and after some further conversation with him, and among ourselves, we went away fully satisfied as to all the particulars of this fact, but confounded and puzzled and not able to form any rational scheme that might account for it."

Jerome Cardan, an Italian physician, boasted that he could separate himself from his senses when he pleased. It is stated that he starved himself to death in order to verify

one of his own predictions.

When the powers of nitrous oxide gas were discovered, Dr. Beddoes assumed that it was a specific for paralysis. A patient was selected for the experiment and the management of the case was given to Sir Humphrey Davy. Before administering the gas he placed a thermometer under the patient's tongue to ascertain the temperature. "The paralytic man, wholly ignorant of the nature of the process to which he was to submit, but deeply impressed, from the

representation of Dr. Beddoes, with the certainty of its success, no sooner felt the thermometer under his tongue than he concluded that the talisman was in full operation, and in a burst of enthusiasm declared that he already experienced the effect of its benign influence throughout his whole body. The opportunity was too tempting to be lost. Davy cast an intelligent glance at Coleridge and desired his patient to return on the following day, when the same ceremony was performed, and repeated every day for two weeks, the patient gradually improving during this time, when he was dismissed as cured, no other treatment having been used."

Physicians know that fear is a prolific source of disease, and that those persons thus affected are more liable to con-

tract a contagious disease than any other class.

Superstition, mystery and bombast are the quack's stock in trade. By superstition, he operates upon the credulity of the people; by mystery, he covers up his own ignorance; and by bombast, of which he has a good supply, he deludes his victims. Or we might summarize it thus: By superstition he converts the imagination into a musical instrument which he calls B flat; by mystery he tunes their discordant ideas to harmonize with his symphony in C sharp; and by bombast he plays upon their finances in his own

key, A major.

Faith is said to be a powerful ally in the treatment of many diseases. This, no doubt, is true, but faith alone makes a very poor drug-store. The mind of the child, or infant, is not exercised with the tenets of faith or anti-faith. The doctrine that the faith of one person can operate upon another in such a manner that it will destroy germs and overcome organic changes has, according to our philosophy, a decided mythical aroma. We recognize the fact that there is a close relationship between the mind and the body. Sterne says, "The body and the mind are like a jerkin and a jerkin's lining, you rumple the one and you rumple the other." Confidence in the physician and his ability to diagnose and treat the disease, is a valuable auxiliary that is desirable; but drugs contain an inherent principle that can act upon the body independent of faith, creed, color or previous condition of servitude.

Then how do you account for the astonishing effects and wonderful cures said to have been effected by talismans, amulets, faith, charms, etc? By the operation of the imagination upon the body, and not from any therapeutical

power or force residing within the agents used.

Masturbation in the Female.

Dr. D. H. Toney, of Naples, Me., reports a case (Mass. Med. Jour., July, 1888) which allows us an opportunity to remark that we fear the profession is not boldly enough instructing their suspicious cases as to the evils of this habit. The subject is so delicate a one to approach in its individual application that the family physician is generally afraid to remark upon it for fear of offering an evil suggestion or giving personal offence where he intends only to do good. As important as is the subject, it is one that should be spoken of in the family only with the greatest circumspection.

The primary factors in the causation of this pernicious habit are psychic and physical. The psychic may be subjective or objective. Subjectively are: 1st, the tainted conditions of heredity; 2d, mental views, distorted though they may be, verified by an equally distorted consciousness. This was the case with Mad. de Warrene whom Rousseau describes so graphically; 3rd, an internal propensity. Objectively are: 1st, Subjective states of mind when persistently dwelt upon. 2d, The moral degradation of nurses. 3rd, The exciting conditions engendered by civilization, i. e., unhealthy associations, unhealthy reading, unhealthy and stimulating diet, unhealthy ventilation, the free license of the drama, the close contact of the waltz, and the manner of dressing. 4th, Want of proper physiological knowledge. Among the physical causes are those that are cerebro-spinal, cerebral only, or those affecting different parts of the sexual apparatus, and ascarides. The psychic and physical causes will be considered in general, as their detailed elaboration would occupy more space than I am entitled to.

In a certain sense it may be asserted that we are processes of heredity, and are evolved from antecedent states and conditions of being. Not infrequently does it happen that a child is born with a predominence of the sensual over the moral, and instances of wonderful youthful precocity are not rare. This tendency to an exaltation of the animal passion may be enhanced by a similar condition in one parent or both, which permeates all of the associations and surroundings of the infant. The natural outcome is a laxity of high principle, a comfortably weakened will, and a moral law enacted to suit the general desires and appetites.

Frequently there is added to this infected atmosphere the care of a nurse, who, to sooth the irritability of the baby, will indoctrinate her with the habit of masturbation, by first

using her own hand and then permitting the child to gratify itself at will. This is, perhaps, the most universal cause. A habit thus inaugurated in infancy, in a child, the victim by inheritance of a strongly animal nature, becomes in adult life a moral necessity by a specious manner of subjective argument. The original concept was never wrong, because almost co-eval with the child. The adult conception which, in a healthy mind, would have demonstrated the moral and physical sin of the act, has never obtained because the false mental view formed in childhood, which saw no sin in the habit but rather a strong defence against the actual commission of fornication, has grown each year more strong, until, by repetition, a lie seems to be the truth, and this mental aberration will be confirmed by a consciousness equally stunted in growth. The woman, whose moral nature has been warped from the earliest days, will argue to herself, that there is no possible harm in masturbation, but that it keeps her from being unduly familiar with men.

Again, some women are the victims, from birth, of a highly sensitive and hyperesthetic nervous temperament, and the least exciting cause is sufficient to upset them completely; with them masturbation is a disease of the nervous system, and should be treated as such. The persistent contemplation of a subjective state of mind, becomes, objectively a cause of masturbation. This state of mind may be engendered by a course of pernicious reading, and when dwelt upon exceedingly, creates the longing that is consummated in self-abuse. The sensualism of a civilization, characterized by the luxuriousness of wealth, has done more to lower a high moral tone among women than any other factor I know of. Apart from the richly seasoned condiments of the table, that stimulate every function, apart from the soft sensuousness of perfumed apartments, thickly covered with softest carpets and draped with richest hangings, apart from the warm rooms and late hours, there pervades society in all its ramifications a license of speech, of dress and of intercourse, which tend to break down the barrier of reserve which a modest maiden never forgets. The books that are read, the plays and operas that are listened to, the dresses that are tolerated, and the dances that are indulged in, are highly conducive to uterine congestion.

Dr. Goodell has so ably exposed the harm of long engage-

ments that I need not dwell upon this point.

Of physical causes in the child, perhaps the most frequent

is the seat-worm. Ascarides, together with a want of cleanliness, set up an irritation that is only relieved by friction. In adult life, we have, as frequent irritants, pruritus vulve, congestion of the ovaries, ichorous discharges from the vagina, erosions of the cervix, and an elongated clitoris. Cerebro-spinal irritation is another cause which may not be lost sight of. The sexual desire seems to be more marked in certain temperaments than in others, especially in thin, sal-

low, nervous women.

Of the treatment little need be said. The cause, if physical, must be alleviated. The system must be built up by tonics, and the nerves quieted by bromides. An unusually elongated clitoris should be amputated, and in certain conditions oophorectomy is indicated. The moral surroundings of the patient must be looked to. She should be instructed, intelligently, as to her condition, and should be removed from all associations and surroundings that aggravate the case. She should be brought into intimate communion with pure, strong minds, and should have the benefit of a bracing climate, with rigorous out-of-door exercise. She should also be interested in some occupation or employment that will amuse her, and should take up a course of reading that will elevate her mind. At such a time as is possible, she should marry and have natural sexual gratification. Many cases are hopelessly incurable. The will has become so weakened that chronic insanity results. others, there is a moral insanity in regard to the pure relationship of the male and female, though in every other particular the woman is perfectly sane. The general cultivation of a higher relationship among the sexes, the dissemination of sound physiological knowledge, not calculated to pander to corrupt tastes, and the purification of social habits and customs are, after all, the most potent medicines in the treatment of this habit, so disastrous in its results, so subversive of physical and moral life, and so prevalent among girls.

Painless Destruction of Nævi.

A. B., aged two years, suffering from a nævus the size of a shilling, behind the right ear, was on May, 13th, 1887, treated in the following manner for its removal. Having first painted the healthy skin around the circumference of the nævus, for about half an inch, with a coating of collodion flexile, a thick layer of a four per cent. solution of corrosive sublimate was applied on collodion over the nævus. On

the twenty-fifth, when the collodion was removed the nevus had entirely disappeared, and nothing remained but a small scab. Dr. Boing was the first to suggest this method of treatment, and my object in publishing this case is to draw attention to so simple, satisfactory and painless a method of treatment.—Brit. Med. Journal.—Mass. Med. Jour., July, 1888.

Tongaline in Dengue.

Dr. A. M. Sittler, of Bowmanstown, Carbon county, Pa, writes: I have used tongaline extensively during an epidemic of dengue or break-bone fever, where I had an opportunity to test it very thoroughly, and I secured much more successful results from it than from the ordinary treatment, consisting of potas. iodid., vini colchici, acid salicyl., quin. sulph., etc, In every instance tongaline fully sustained the high character with which it is presented to the profession, and only deserves to be well known in order to be thoroughly appreciated.

A Letter Relating to Pil. Antiseptic and Antiseptic Comp.

The late eminent physician and most acute observer, Dr. Austin Flint, Sr. has said: "Physicians are often consulted by patients, who, although far from being well, have no well defined malady. They complain of langour, lassitude, want of buoyancy, aching of the limbs and mental depression. They are wakeful during the night and enter upon their daily pursuits with a sense of fatigue. "An investigation of the different organs of the body reveals no evidence of disease; the lungs, heart and kidneys are sound. Some of the affections embraced in the posological catalogue may be discovered, yet the morbid condition is real." Hardly a practicing physician will read the above without recalling at once a number of cases with the identical symptoms as given by Dr. Flint. He will also remember how stubbornly such cases have resisted all the usual remedies, and dietetic precautions. Now what is the trouble and what the remedy? The trouble is simply chronic blood poisoning from malaria, sewer gas, or what is far more likely, from the products of a defective assimilation of food in the blood circulation. The remedy lies in first destroying these ptomaines, and for this there is no better or more quickly acting remedy than Pil. Antiseptic, made by Warner & Co., as any intelligent physician will see at a glance on noting its composition or he will realize happily upon prescribing the remedy. This is not theory but fact, tested by experience.—Dr. F. S. GRANT.

Book Antices.

Applied Anatomy of the Nervous System. By AMBROSE L. RANNEY, A. M., M. D., Professor of the Anatomy and Physiology of the Nervous System in New York Post Graduate Medical School and Hospital, etc. Second Edition. Rewritten, Enlarged and Profusely Illustrated. New York: D. Appleton & Co. 1888. Cloth. 8vo. Pp. 791—XXXV. Price \$5. (For sale by West, Johnston & Co., Richmond, Va.)

We recognized that the first edition of this book would supply a need. The present edition is so great an improvement over that edition that that edition must now be considered only as primer to a more advanced work. work records a study of the nervous system of the human body from a standpoint of its general interest and practical utility in diagnosis, designed for use as a text book and a work of reference. The most recent advances as to the localization of brain centres are plainly given, and the text is greatly assisted by illustrations and diagrams. In fact, before undertaking such an operation as trephining for a brain disease, one would be considered derelict in a plain and obvious duty did he not first consult this book. The sections or articles on the cranial nerves and the spinal cord have been brought up to the latest date of announced advances. Such a book as this is not only valuable for reference, but for study on the part of the practitioner in order that he may make proper diagnoses, locate lesions of the nervous system and trace the relations of signs and symptoms to diseases of remote parts of the dody. Practically speaking, every important nerve in the body is traced to its origin, and its function is told. The index gives quite accurate reference, so far as we have examined, to the page on which the special nerve is described In the study of neuralgias, the distributions of pain, the various paralyses, and the conditions of nerves involved in the production of spasms, etc., this work is simply invaluable.

Partial Syllabic Lists of the Clinical Morphologies of the Blood, Sputum, Fæces, Urine, Vomitus, Foods, Water, Air and Clothing By EPHRAIM CUTTER, M. D., A. M., L. L. D., F. R. Sc. (Lond), Principal Medical Department, American Institute of Micrology, etc. New York: The Ariston. 1888. 8vo. Pp. 81. Cloth. (From Author.)

The present publication is what it claims to be—a syllabus. Its purpose is rather to test the demand or not for a fuller work on the subjects named in the title, which fuller

work is promised if the present work is encouraged by the profession. Morphology is a word applied by the author some ten or more years ago to description of the forms or changed conditions found in the blood, sputum, fæces, urine, etc. An understanding of the morphologies named in this book will permit a diagnosis of (1) the pretubercular state, or in the invasion or the breaking down stage of consumption of the lungs; (2) syphilis; (3) rheumatism in its various forms; (4) fibræmia, anæmia, leucocythæmia, malaria, diseases of fatty degeneration, sclerosis, locomotor ataxia, etc. The subject is a comparatively new one to many practitioners, but it is none the less important in all of its practical bearings for clinical purposes. And if this notice of this "Partial Syllabic Lists" will induce some of our readers to take enough interest in the subject to lead to further inquiry of the author, we will feel that good has been accomplished.

We wish to publicly recognize our appreciation of the compliment done the editor of this journal by the author of the book in placing his name among the list of distinguished men of the profession to whom he dedicates his work.

Theine in the Treatment of Neuralgia. By THOMAS J. MAYS, M. D., Professor of Diseases of the Chest in Philadelphia Polyclinic, etc. Philadelphia: P. Blakiston, Son & Co. 1888, 12mo. Pp. 84. Price, 50 cents. (From Publishers.)

This is a neat reprint of the instructive papers which appeared in successive issues of The Polyclinic from September 1887 to February 1888 inclusive. From the well made experiments and observations of Dr. Mays, it seems that theine is to be ranked along with morphine, with these practical differences as to the indications for their respective uses. "In other words," to quote the author, "when it is necessary to narcotize the centres of innervation in order to relieve a given pain, then morphine is indicated; but when it is not necessary to do this, then theine will accomplish the work safer, better and more promptly. On general principles, it may, therefore, be stated that morphine gives the best results in acute pain, while theine is most beneficial in chronic affections of the sensory nerves." Hence its greater value than morphine in the more chronic neuralgias, such as those of malarial and rheumatic origin, etc. In sciatica, chronic intercostal neuralgia, in dorsal or interscapular, in cervicobrachial, in occipital neuralgias, etc., in spinal irritation, in neurasthenia, and other painful diseases of a chronic character, theine is the remedy. The hypodermatic dose varies from a third of a grain to two grains of Merck's prepara-

M. S.—Six minims equal to one half grain of theine.

Medical Publications, Harvard Medical School. 1887. 8vo: Cloth. Dr. J. COLLINS WARREN, Boston, Mass., Chairman of the Committee on Publications,

This is not a book intended so much for sale as to show the character of the original work done by the instructors of the Harvard Medical School, or under their personal supervision during the year 1887. It is made up of a number of articles contributed to various journals or transactions, and does not include clinical papers, nor does it represent more than a portion of the work for the year. This collection includes papers by Dr. H. P. Bowditch on the "Action of Sulphuric Ether on the Peripheral Nervous System;" by Dr. Franklin H. Hooper, on the "Anatomy and Physiology of the Recurrent Laryngeal Nerves;" by Dr. Joseph W. Warren on "The Effect of Pure Alcohol on the Reaction Time, with a Description of a New Chronoscope;" by Dr. Thomas Dwight, on "Range of Variation of the Human Shoulderblade" and "Notes on Muscular Abnormalities;" by Dr. J. Collins Warren, on "Process of Repair after Resection of the Intestine;" by Dr. E. G. Brackett, on "Experimental Value of the Dowse Splint;" by Dr. Herbert L. Burrell, on "Fracture of the Spine; its Immediate Treatment by Rectification of the Deformity and Fixation by Plaster of Paris Jacket;" by Dr. T. M. Rotch, on "Artificial Feeding of Infants;" and by Dr. Harold C. Ernest, on "Experimental Research upon Rabies."

Relation of Alimentation and Disease. By J. H. SALISBURY, A. M., M. D., LL. D., Member of various Societps and Author of several Prize Essays and Numerous Papers, etc. New York: J. H. Vail & Co. 1888. Cloth. 8vo, Pp. 332. (From Publishers.)

The "Salisbury plan of treatment" has been long enough before the profession to be thoroughly tested; and with such favor has it been received by those who have used it that the numerous publications on the subject have made "the plan" familiar to doctor's generally. The basis of the practical bearing of this work is the now well proven theory

that nearly all diseases not due to parasites, poisons or injuries are the outcome of defective and unhealthy feeding. The object of the book is to teach reform in feeding details are too numerous for an attempt at description within the limits of a book notice. But the established value is sufficient for us to urge upon every practitioner the great importance of a careful study of each detail and adopting them in the treatment of the sick-especially those having consumptive diseases. Dr. Salisbury's record of experiments and observations cannot fail to impress the reader that the adoption of his directions will result in saving many lives that, under the older plans of treatment, would certainly not be saved. We regard this book as one of the most useful that has recently been published, and we trust our readers may be sufficiently influenced by this notice to put the "Salisbury plan" to actual test, and to be followed by reports of the success or failure.

Editorial.

Engraving of the Late Dr. Cornelius R. Agnew.

We take pleasure in publishing the subjoined announcement. Dr. Agnew was a man of such eminence in the profession—especially in the line of ophthalmology and otology—and such excellence of character as to leave his impress upon the professional mind the world over. His engraving is entitled to a place among those of the great that hang conspicuously on the walls of those practitioners who respect and honor worth and ability, and we trust our subscribers will not lose the rare opportunity presented in securing a copy of this engraving.

"At the last meeting of the Ophthalmological and Otological Section of the New York Academy of Medicine, the

following motion was made and carried:

"That a Committee be appointed, of which the Chairman of the Section, Dr. David Webster, be a member, whose duty it shall be to obtain a good photograph of the late Dr. Cornelius R. Agnew, for the purpose of having engravings suitable for framing made from this. The right of issue and sale of such engravings shall be given to some first-class publisher, if practicable; if not, the Committee shall offer them to the profession at cost."

In accordance with the above, a Committee has been appointed. Members of the profession who desire such an

engraving, accompanied by an autograph signature, should send their names and addresses to the Secretary of the Committee, Dr. Charles H. May, 640 Madison avenue, New York city, at once. When all such names shall have been recorded, those who have requested a copy of the engraving will be notified of the cost of the same, either by the publisher, or by the Committee having the matter in charge.

Medical Classics

Is a bi-monthly journal containing so much of ancient medical history that is being collected from the earliest authors that every student of the literature of medicine should be a subscriber. It is published in New York city, 38 Murray Street. Price, \$1. a year, or 25 cents a number. Drs. Ferdinand Seeger and John Macmullen, Editors.

Mr. John W. Pierce

Of the drug firm of Harrison & Pierce, of this city, who has lately been appointed a member of the Virginia Examining Board of Pharmacy, appreciating the necessity of a thorough knowledge of the physical characters of drugs, has procured a cabinet of fine samples—288 in number—of the enterprising firm of more than national repute, Messrs. Parke, Davis & Co., of Detroit. These samples embrace all the vegetable products of the U. S. Pharmacopæia, together with others of daily use that are not recognized therein. To become thoroughly familiar with the contents of this cabinet is to be able to recognize at sight all the crude vegetable drugs of the Pharmacopæia. Physicians and druggists would do well to call at the store (corner Broad and Foushee) and examine it. It will prove interesting and profitable to do so. He has also a specimen of strophanthus, of direct importation, and other botanical specimens which are attracting attention as new remedies, etc. We regard such enterprise on the part of our townsman as deserving commendation. It gives an impetus to the pharmacological student, as it enables him to become thorough in this branch. The physician must have an intelligent and well informed apothecary.

The Southern Surgical and Gynæcological Association

Is to hold its second annual session in Birmingham, Ala., September 11th, 12th and 13th, 1888. Dr. W. D. Haggard, of Nashville, Tenn., is President; Dr. W. E. B. Davis, of Birmingham, Ala., is Secretary. Under officers of such re-

nowned ability and energy, this organization should prove of great service, and we are confident that the programme for the approaching session will be very attractive.

Infants' Foods.

According to an editorial in the Philadelphia *Medical Times* of June 1st, "The conditions formulated by the Committee on Infants' Foods at the American Medical Association are approximated more nearly by Carnrick's Food than by any other with which we are familiar.'

Reed & Carnrick's Diet Tables.

These tables state the diet that may be taken by patients. Each table is on a perforated slip so that it is to be torn out of the book and given to the nurse. They are excellent for the sick room and are easily carried by the physician. Full directions accompanying each table. Messrs. Reed & Carnrick intend to place one these little books, free of charge, in the hands of every physician in the United States, who cares to use them. We trust each of our subscribers will at once apply to the firm (Nos. 2, 4 and 6, Harrison Street, New York city, by letter for one of these diet tables. It will pay.

Medical Department of the University of Virginia—Graduates.

This Institution had a most prosperous session, which ended June 27th, 1888. The number of medical students were nearly 90, and yet only 22 succeeded in securing the degree of Doctor of Medicine. The following is a list of

the young doctors:

Drs. J. B. Anderson, of Gaines's Cross Roads, Va.; A. Anderson, of Wilson, N. C.; S. C. Baker, of Sumter, S. C.; Chas. M. Blackford, of Lynchburg, Va.; J. B. Catlett, of Staunton; W. D. Cudliff, of Shreveport, La.; W. F. Faison, of Clinton, N. C.; John T. Graham, of Wytheville, Va.; C. D. Hill, of Faison, N. C.; J. H. P. Hodgeson, of Sewanee, Tenn; J. S. Hope, of Portsmouth, Va.; R. D. Jewett, of Wilmington, N. C.; Southgate Leigh, of Norfolk, Va.; J. Page Massie, of Sandidges, Va.; T. S. McMullan, of Hertford, N. C.; Guy Miller, of Lynchburg, Va., C. L. Minor, of New York city; G. T. Smith, of the University of Virginia; W. L. Tate, of Greensville, Va.; J. W. Tayloe, of Winston, N. C.; J. L. Thompson, of Lexington, Ky., and Bernard Wolff, of Richmond, Va.

We are glad to learn that the University is in a most

flourishing condition, and that its objects of pride continue to be thoroughness of education and a very high degree of attainments in order to secure its medical diploma. We wish all other institutions which undertake to be competitors would determine upon a like high standard of qualifications for graduates; and there Boards of Examiners—now a necessity to save the public from the infliction upon them of graduates of some other colleges—would have little more than routine work to perform.

The New York Polyclinic Hospital.

The Faculty of the New York Polyclinic have decided to increase the clinical facilities of this Institution by establishing a spacious Hospital immediately connected with the College Building. It will be opened for the reception of patients in October next.

Dr. George Ben. Johnston,

In anticipation of an absence of some months from this city in South America, has resigned his Professorship in the Medical College of Virginia, and also his Chairmanship of the Committee on Invitation for Medical Society of Virginia. We hope Dr. Johnston a pleasant trip and a safe return.

Committee on Invitation, Medical Society of Virginia.

The resignation from this Committee of Dr. Johnston has caused the President of the Society (Dr. Benj. Blackford, of Lynchburg, Va.) to appoint Dr. Landon B. Edwards of Richmond, Chairman of this Committee, and Dr. J. Herbert Claiborne, of Petersburg, Va., to fill the vacancy on the Committee. Fellows of the Society who wish their friends from outside the State invited to participate in the coming session should remember that the recently adopted resolution requires that all such invitations are to pass through this Committee. Parties interested will, therefore, confer a favor by at once communicating their wishes to Dr. Edwards. The Medical Society of Virginia is to meet in Norfolk, Va., October 23rd, and therefore no time is to be lost in complying with the request.

The Medical and Surgical Reporter

Of Toledo, Ohio, is another applicant for journalistic success. Monthly, Price \$2. a year; large size 16 pages monthly; Dr. Charles P. Wagar, Editor. The first issue was made July 1st. "Antithermic Medication" by Dr. Collamore;

"Shock and Operation," by Dr. Woods; "Therapeutics in Diseases of the Skin," by Dr. Van Pelt, and a "Case of Epispadias," by the Editor, constitute the original contributions to this initial number. We wish it success, and cheerfully place it on our exchange list.

Dr. Louis C. Bosher

Of Richmond, Va., has been elected Professor of Anatomy to fill the vacancy caused by the resignation of Dr. Geo. Ben. Johnston, from the Faculty of the College in this city. Dr. Bosher is a very capable man, and will make a good teacher.

Dr. M. L. James

Has been elected Surgeon to the Richmond City Alms House for the current term of two years.

Rockbridge Alum Springs.

The announcement of the opening of these celebrated Springs this season under the management of Col. George L. Peyton gives assurance of success, and will be hailed with infinite delight by those of our Springs-goers who are in the habit of visiting the Rockbridge Springs. His long term of sixteen years as managing partner of the renowned White Sulphur Springs has established his ability and popularity. He has added to his means of making the Rockbridge Alum the more popular this year by selecting as the Resident Physician, Dr. J. Edgar Chancellor, of University of Virginia, who in addition to his many other honors, is an Ex-President and an Honorary Fellow of the Medical Society of Virginia. It was in regard to these Springs that the Medical Society of Virginia, through a Special Committee appointed to investigate the medicinal virtues of their waters, made a most favorable report some years ago, especially with reference to diseases and disorders of the digestive organs.

Rev. Robert L. Dabney,

Of Austin, Texas, now Professor in the University of Texas, and formerly Stonewall Jackson's Chaplain, to whom we are indebted for the Life of Jackson, recently spent a week in our city, at the Richmond Eye, Ear, Throat and Nose Infirmary. He is suffering with an affection of the eyes, and came here to place himself under the care of the specialist, Dr. Joseph A. White.

Richmond City Board of Health.

The recent election resulted in favor of Drs. Oppenheimer, Ben. Harrison and Curd.

Dr. Henry M. Clarkson

Of Haymarket, Va., has been appointed Acting Assistant Surgeon, U. S. Marine Hospital Service, for the present summer to serve at Cape Charles Quarantine Station, Va. This is an excellent selection. Dr. Clarkson will resume practice at his home next Fall, when his duties at the Quarantine Station have been fulfilled.

Obituary Begord.

Dr. Alexander Yelverton Peyton Garnett

Died, July 11th, 1888, of heart-failure, at Rehobeth Beach, Delaware. His home was Washington, D. C., but having suffered severely from prostration for some time, he visited the seaside resort named for the purpose of recuperation. He had been at the Beach but a few hours when the sudden summons from time to eternity fell upon him.

The prominent position which Dr. A. Y. P. Garnett has long held before the profession makes the unexpected intelligence of his death fall as a blow upon a large circle of professional friends all over this continent, and the brief biographical sketch which an opportunity allows us to give

will be read with interest.

Dr. Garnett was born in Essex county, Va., September 19, 1820, and hence was nearly 68 years of age. He graduated in medicine, when not quite 21 years of age, from the Medical Department of the University of Pennsylvania. During the year of his graduation (1841) he passed the usual satisfactory examinations and entered the United States navy as Assistant Surgeon. In due course he became Passed Assistant and then full Surgeon, in which capacity he served until he resigned the navy in 1848. He then located and commenced the practice of medicine in Washington, D. C. He was during this year elected Professor of Clinical Medicine in the National Medical College, of Washington city. He rapidly gained influence and practice. But when the war between the States was declared in 1861 he removed to Richmond, Va., and offered his services to the Confederate Government. He was at once commissioned as Surgeon

and placed in charge of two hospitals in Richmond, and he was soon appointed one of the Board of Medical Examiners for the Confederate States army. He thus served the Confederacy throughout the war. While a resident of Richmond he was the family physician of President Jefferson Davis. of General Robert E. Lee, and also of most of the Confederate Cabinet officers. When Richmond was evacuated he accompanied Mr. Davis until arrested. After the war he returned to Washington, D. C., and was again elected Professor in the National Medical College. When he resigned his professorship in 1870, he was elected Emeritus Professor. Prior to 1861, and since his return to Washington after the war, he was a prominent member of both the Medical Society of District of Columbia and of the Medical Association of the same District. For some years before his death he was a member of the Board of Directors of the Children's Hospital, of St. Ann's Asylum for Foundlings, and one of the Advisory Board and Consulting Physicians and Surgeons of the Columbia Hospital for Women. He was the Chairman of the Committee of Arrangements for the Ninth International Medical Congress which met in Washington in 1887. In June, 1887, he was elected President of the American Medical Association, and as such presided during the recent session of the Association last month in Cincinnati. Ohio. While his contributions to medical literature were numerous, perhaps the one that most distinctly marks his ability was his paper some years ago, "Refuting the Claims of Condurango as a Cure for Cancer." In 1848 he married Miss Mary E. Wise, eldest daughter of the late Ex-Governor Henry A. Wise, of Virginia.

Dr. Garnett was a man of sterling worth. He was a good physician, and a loyal defender of the code of ethics. He was bold to attack anybody or anything he thought to be wrong in principle, but in the amenities of life he was as courteous as a Chesterfield and his sympathies were as tender as those of a true woman. His record will furnish a good example for the young members of the profession to follow. His death is now lamented as a national professional sorrow.

Dr. S. B. Kello,

Of Ivor, Va., died at his home, July 10th, 1888. He was a Fellow of the Medical Society of Virginia, and enjoyed an excellent reputation among his brother practitioners. We regret that we have not memoranda at hand from which to prepare a fuller notice.

VIRGINIA MEDICAL MONTHLY.

VOLUME XV-No. 5.

WHOLE NUMBER, 173.

RICHMOND, AUGUST, 1888.

Griginal Communications.

ART. I.—Starch vs. Dextrine—Nutrition. By W. IRVING THAYER, D. D. S., M. D., Brooklyn, N. Y.

A section of the late American Medical Association devoted its time to the consideration of a subject that is of the greatest importance to every physician; that is, dietetics and infant-feeding.

While all physicians agree that the natural method of feeding infants is the best, yet the profession are forced to consider facts in relation to artificial feeding, since there are so many babies that require to be fed by artificial means.

Wm. B. Atkinson, M. D., a member of the Committee on Dietetics, inquired, "What means shall be employed to prevent the terrible mortality among infants deprived of their natural food?"

Indeed, this is a question that comes home to every medical practitioner with a force of weighty responsibility. The counsel of the attending physician is law and gospel to those who seek it.

"Terrible mortality!" as Dr. Atkinson puts it; and the language is none too strong. And it will so continue to be

a "terrible mortality" just so long as these little innocents are fed on starch, maltose and cow's milk, reduced, never so much!

No artificial food that contains unconverted or raw starch can be properly digested by an infant under 18 months of age. By the natural process of digestion, in the strong and healthy, the starches are converted into dextrine by the action of the pancreatic and intestinal secretions. The amyolytic ferments in these secretions convert starch into dextrine, then into soluble sugar. Young children do not possess enough of these ferments to perform the necessary conversion; hence, these starches may be injected in enormous quantities, yet they pass through the intestinal track, rasping their way to the outer world—as raw starch, still! Magendie fed dogs on starch, sumptuously, and starved them to death in forty days!

The hydro-carbons (starches) are a necessary element in an artificial food for infants, but they should be partly predigested by converting them into dextrine, as in Carnrick's Soluble Food, so that, when they have entered the duodenum, by the addition of one molecule of water and the farther solution performed by the aforesaid amyolytic ferments, the dextrine is easily converted into maltose or soluble sugar, and is then ready for immediate absorption, and is immediately absorbed and gotten into the circulation.

Baby foods that contain their hydro-carbons in the form of a full conversion are objectionable for two reasons. One is, that they are so very laxative that they cause both hiccough and chronic diarrhea. The second objection is, that such foods present for the consideration of the digestive apparatus of the child a pabulum that does not require any active digestion. Now, since it is a well established and long observed law that to maintain the various parts of the body in a healthy and normal condition such parts of the body must be exercised, it is plain that muscular tissue cannot develop without exercise, neither can normal function be long retained in the digestive apparatus if the natural functions of digestion are not reasonably performed.

For these reasons, an infant's food ought not to be wholly,

but only partly predigested, and should be gotten as near human milk, in this respect, as is possible.

There are many things to be considered in the feeding of infants, naturally and artificially, such as making provision for the full nutrition of every tissue. This is seldom consid-

ered, but is very important.

I have a reliable analysis, made by Stutzer, showing the composition and ease of digestion of some eight different kinds of infant foods, which I will add for the criticism of the reader. I will divide them, as they are, into starch,

malt, and milk or nitrogenous foods.

Starch foods. Dr. Ridge's food contains of the albuminoids, nitrogenous matter, 8.76 per cent.: cellulose, which is indigestible, 0.73; lime salts, together with the phosphoric acid, which are the true petrous tissue (teeth-builders), only 0.48 per cent.; phosphoric acid, 02.60; and ease of digestion, 7.97. Wells, Richardson & Co.'s food—Albuminoids, 9.05; cellulose, 1.54; lime salts, 2.26; phosphoric acid, 0.688; and ease of digestion, 8.35. Imperial Granum's—Albuminoids, 10.73; cellulose, 0.97; lime salts, 0.37; phosphoric acid, 0.167; digestion, 0.167.

Malt foods. Mellin's-Albuminoids, 8.34; cellulose, 0.58; lime salts, 3.53; phosphoric acid, 0.583; digestion, difficult, 7.38. Horlick's food—Albuminoids, 11.30; cellulose, 0.55; lime salts, 2.76; phosphoric acid, 0.421; digestion, 10.85.

Milk foods, which are the richest in albuminoids and lime salts, that are in a well balanced proportion with the phosphoric acid. Nestle's Food-Albuminoids, 11.46; cellulose, 0.10; lime salts, 1.75; phosphoric acid, 0.630; ease of digestion, 11.09. Anglo-Swiss Food—Albuminoids, 12.38; cellulose, 1.09; lime salts, 1.95; phosphoric acid, 0.800; and ease of digestion, 11.20. Carnrick's Soluble Food contains of the albuminoids 18.22 per cent. and woman's 17.08 per cent.; cellulose, none; lime salts, 2.991; phosphoric acid, 0.874; and ease of digestion, 16.45—similar to human milk.

In speaking of artificial foods, Dr. Earle remarked, in the late American Medical Association, that "it is claimed for Carnrick's Soluble Food that it will thoroughly nourish a child without the addition of cow's milk, and that it approaches nearer human milk in composition and digestibility than any that has been placed upon the market up to this time."

Cow's Milk.—There are some cases where cow's milk seems to agree with certain children who have a very strong digestive apparatus. These are the exceptions, however. It is certain that cow's milk is made of doubtful value by being carried long distances by railroads, put into cans that are many times sour and full of bacteria, and churned over our rough city pavements.

COMPARISON OF COW'S AND HUMAN MILK.

Human positi 43 w	milk. Mean Com- ion from milk of omen. Meigs 81.163	Average of cow's milk.
Fat	4.283	3.759
Casein	1.046	3.022
Sugar	7.407	4.949
Ash		.490
	100.000	100.000

Thus it will be seen by a glance to the above table that there is nearly 300 per cent. more casein in cow's milk than in human milk. Cow casein is much more difficult for an infant to digest than the same albuminous matter in mother's milk. In the latter fluid the casein is spongy or flacculent, while cow casein is tough and cheesy. If, however, the attendant of the child will but partly predigest cow's milk, and add a little more of milk sugar, then we will have a good substitute for mother's milk. Few, however, are found competent to do this successfully.

If an artificial food is to be given young children, qualities that are necessary are ease of digestion, similar to human milk, avoiding a malt or starchy food, whose conversion has been complete, as in the former, and not at all attempted in the latter.

A food whose lime salts and phosphoric acid has been well adjusted, so that the enamel, dentine and cementum of tooth-structure are going to have a liberal supply of the kali-salts for tooth-building, is the best. The teeth begin to form at the sixth week from conception, and so continue for

the next twenty years. The expectant mother ought to eat liberally of the *coarse* breads—breads constructed out of the *un*-bolted variety of grain eaten. There is no other food where these salts can come from that can be so easily digested, absorbed and appropriated as from breads made from the *meal* product of our cereals.

As ordinarily fed, the mother's milk is not well supplied with the lime salts. It should be as suggested above, for this reason, that teeth once built up are built up forever. It is

when building that they require the lime salts.

The human tooth decays much faster to-day than ever before, and because they have been *starved*—prevented from receiving the pabulum that they require when forming, to make them *strong*, flint-like and able to bear the necessary attrition, acid conditions, and the new-found terror—the pestiferous microbe.

89 S. Portland Ave.

Glinical Reports.

Case of Strangulated Hernia—Other Measures Failing, Laparotomy Performed—Part of Ileum Paralyzed—Manipulation of the Gut Removed Obstruction—Recovery. By T. M. BOWYER, M. D., Liberty, Va.

At 7 A. M., April 21st, I was hastily summoned to visit Mrs. C. The history given me of the case was that at 5:30 A. M. she arose in her usual health, and, whilst engaged in her domestic duties, had been suddenly seized with a sharp

pain in the right groin.

The patient was found almost in a state of collapse. Pulse small, extremities cold, countenance pale, and vomiting at intervals. Upon examination, I found right femoral hernia closely strangulated. I at once administered by the mouth half ounce of whiskey, and, hypodermically, morphia sulphate one-sixth grain, and applied poultice to hernial tumor, warmth to the extremities, and awaited reaction from shock. Upon my return, at 9 A. M., I found reaction established. Then I administered chloroform and attempted reduction by taxis. Failing in this, however, after a rea-

sonable effort, I determined to operate with as little delay as practicable, and requested her husband to procure an assistant.

Dr. Walter Izard, of this place, was accordingly called, and, after himself making an abortive effort at reduction under chloroform, he agreed with me as to the importance

of an early operation.

Accordingly, as soon as the necessary arrangements could be perfected, Dr. Izard administered the chloroform, while I proceeded with the operation upon the closest strangulation I ever encountered. However, the knuckle of gut was returned without difficulty, yet the relief obtained was only partial—nausea with occasional vomiting continuing.

Notwithstanding the short duration of the strangulation, the sack and gut had become very dark and engorged. Under the influence of small doses of morphia, repeated at short intervals, the patient passed a fairly good night, but awoke in the morning with the same troublesome symp-

toms.

April 22d—Sunday, 8 A. M.—Pulse 92, small. Temperature 98°. Skin cool. Some tympanites. Applied poultice to abdomen. Administered Seidlitz powder, to be followed at 2 P. M. with enema of soapsuds and turpentine. This injection brought away quite a free discharge of feecal matter.

6 P. M.—No improvement. Nausea very troublesome. Ordered enema of milk, brandy and laudanum. Passed a

good night.

April 23d—8 A. M.—Pulse same. Temperature 99°. Tongue coated. Tympanites increased. Nausea and vomiting persistent. Ordered lime water and milk in small quantities. Continued poultice to abdomen.

2 P M.—Condition unchanged. Treatment continued. 6 P. M.—Condition still unaltered. Ordered 12 grs. cal-

omel.

8 P. M.—Repeated enema of milk, brandy and laudanum, and ordered small quantities of lime water and milk, with

ice, to be administered during the night.

April 24th—8 A. M.—Temperature 99°. Pulse 92, small. Skin good. Countenance good. Tympanites increased. Nausea and vomiting occasional. Some pain in lower portion of abdomen. No action from calomel. Directed enema of soapsuds and turpentine, which was returned without fœcal dejection.

12 M.—Directed enema of milk, brandy and assafætida.

Tympanites increasing. Nausea and vomiting very troublesome. Extremities cool.

6 P. M.—Condition unchanged. Directed milk, brandy

and laudanum to be given by enema at bed-time.

April 25th—8 A. M.—Passed bad night. Temperature 99.5°. Pulse 100. Tympanites increased. Breathing oppressed and stomach more irritable. Requested consultation. Dr. Izard was recalled. Suggested aspiration for relief of tympanites. Introduced small-sized aspirating needle, half inch to the left of umbilicus, at a point where the distension seemed most pronounced. A very free discharge of fœcal-smelling gas followed the introduction of needle, and temporary relief to respiration and tympanites ensued. Ordered a very large enema of soapsuds and turpentine to be given, which was again discharged without fœcal evacuation.

12 M.—Large quantities of stercoraceous matter vomited. Now satisfied that my patient had but one chance for help, the bowel being manifestly still occluded, there was no farther time to be lost. I determined upon laparotomy. Announcing this determination to her husband, I requested that Drs. Walter Izard and John W. Sale be called to my assistance.

2 P. M.—Drs. Izard and Sale present. Condition of patient unchanged. Dr. Sale suggested that he had recently seen reported the use of pure glycerine by enema as effective in similar cases, and requested it to be tried in this case; was agreed to, the Doctor remaining to administer the remedy and observe results. Prompt dejection of glycerine followed, and with it the milk and laudanum formerly used, giving no relief to the patient, and yet so elating the hopes of friends as to necessitate a postponement of operation for several hours.

10 P. M.—Condition of patient unchanged. Drs. Izard and Sale recalled. Every preparation being made, the patient, with her full consent, was placed upon the operating table. Dr. Sale administered chloroform, and Dr. Izard rendered me, very skilfully, all necessary assistance.

The sponges having been thoroughly boiled and cleansed, were placed in a 1:500 solution of bichloride of mercury, instruments immersed, hands of surgeons washed, and abdo-

men of patient scoured with same solution.

· I made an incision below the umbilicus of five inches length in the median line down to the peritoneum, which was carefully opened and divided on a director. The vei-

nous hæmorrhage, though somewhat profuse, was readily controlled by hot water. The peritoneum was found somewhat congested, and the small intestines through their whole course to the point of stricture were very dark.

When the point of obstruction was reached in the ileum, no band or twist was found, as we had apprehended; but the gut seemed to have been, as it were, paralyzed by its intense

stricture in the abdominal ring.

The question then presented itself as to what plan should be adopted to relieve this new and unlooked-for condition. Believing the walls of the gut to be only paralyzed, and not adherent, I gently, with thumb and index finger, pressed the gas with which the upper bowel was greatly distended, downwards against the point of obstruction, and, to my intense relief, found the gas readily passing through. After a considerable quantity had thus been pressed past the point of obstruction, I moved along in like manner the fluid contents of the bowel. Very soon we had the satisfaction of observing the engorgement disappearing as the bowels were being returned to the abdominal cavity. This was done as rapidly as was consistent with caution.

The incision was brought together by two deep silverwire stitches, four superficial silk stitches, and several long strips of rubber plaster. I then dressed the wound with a bat of antiseptic cotton, securing the whole with bandage firmly bound around the abdomen. The operation was completed in about forty minutes after the time when the

patient was placed upon the table.

As my patient emerged from the influence of chloroform, she ejected a very large quantity of stereoraceous matter. This was her last act of vomiting. She was removed from the table to her bed, expressing a feeling of intense relief, and calling for a glass of cold milk, which she drank with much relish.

I directed an enema of milk, whiskey and laudanum to be given, and enjoined rest for the remainder of the night.

April 27th—8 A. M.—Passed comfortable night. No nausea. Temperature 98°. Pulse 92. Directed iced milk, to be given every two hours in small quantities.

12 M.—Condition unchanged.

6 P. M.—More comfortable. Tympanites disappeared.

10 P. M.—Resting quietly. No change.

April 28th—8 A. M.—Passed a good night. Temperature 99°. Pulse 95. Strength improved. Relieved bladder with catheter, some gas passing per rectum.

12 M.—Patient still improving and calling for more substantial food, which, however, was not yet allowed.

6 P. M.—Improvement steady. No elevation of tempera-

ture and no pain. Milk diet continued.

April 29th-8 A. M.—Passed fairly good night. Temperature 100°. Pulse 90. Taking nourishment with relish. Directed enema of soapsuds, which brought away slight motion from bowels.

12 M.—Temperature 100. Skin good. Tongue clean. 6 P. M.—Temperature 98°. Pulse 90. Sleeping pleasantly at intervals. No pain. No tympanites. Taking milk with relish.

11 A. M.—Wakeful. Feeling faint and empty. Quite nervous. Directed tablespoon of whiskey, with more milk

and ice. Quieted, but not put to sleep.

April 30th—8 A. M.—Temperature 99. Pulse 100. Tongue cleaning. Directed solid food to be given, with milk. Examined wounds; that from hernial operation healed by first intention; no suppuration from abdominal wound. I neglected to state that on second day I had dusted abdominal wound with iodoform.

12 M.—Less nervous. Taking food regularly.

10 P. M.—Much more quiet than on previous night.

May 1st—8 A. M.—Passed good night. Partook of stewed squirrel, bread, butter and milk for breakfast. An enema of warm soapsuds brought away a free discharge of feecal matter. Temperature 98°. Pulse 88.

12 M.—Good appetite for dinner.

6 P. M.—Temperature 99°. Pulse 95. Nervous.

10 P. M.—Condition unchanged. Directed teaspoon of bromidia.

May 2nd—8 A. M.—Slept well. Temperature 98.5°. Pulse 95. Feeling rather badly. No appetite for breakfast.

12 M.—No change. Took milk at intervals. Wound doing well. Directed enema of warm water at 4 P. M. Had three copious feecal discharges; no exhaustion following.

10 P. M.—Appetite returning. Temperature 98°. Pulse 100. Some disposition to further movements from bowels.

Directed enema of milk with 30 drops of laudanum.

May 3rd—8 A. M.—Passed perfect night. Temperature normal. Pulse 80. Appetite returned. Condition in every way satisfactory. Used commode for the first time since operation. Had healthy and natural action from bowels and bladder.

May 4th—8 A. M.—Condition still satisfactory.

May 5th—8 A. M.—Improvement continuing. Removed silk stitches and one wire stitch. Wound closing by first intention.

May 8th.—Report still good. Examined wounds; slight discharge from one wire suture; quite an abscess formed at point of introduction of aspirating needle.

May 10th—8 A. M.—Opened abscess; quite a quantity of

pus discharged.

May 11th, 12th, 13th and 14th.—Improvement steadily going on. Bowels acting regularly and patient sleeping well at night.

May 15th.—Removed the last wire suture; found wound

adherent; slight granulation on the surface.

May 25th.—Discharged patient well, thirty-fifth day from first operation.

Extra-Uterine Pregnancy—Removal of the Decomposing Fœtus by Thermo-Cautery Through Douglas' Cul-de-Sacby Hunter McGuire, M. D., LL. D., Surgeon to St. Luke's Home. Reported by EDWARD McGUIRE, M. M., Richmond, Va.

Mrs. M. A. L., residence, Henderson, Texas, age 40 years and 8 months, conceived March, 1879. Quickening took place about June 1st. She had violent hæmorrhage from the uterus about May 15th; also great prostration and partial collapse, which was accompanied by intense pain in the right "iliac region." She also vomited almost incessantly through the months of June, July, August, September and November, and until about the middle of December, at which time the feetal movements ceased. This was accompanied by some "pains" and discharge of membrane, or "decidua" from the uterus. Following this, for six or seven months there was "hectic fever," and she became very much emaciated—the abdomen even decreasing in size. About this period, menstruation with appetite and other indications of better health began to return, which continued with great regularity until about November 1st. 1887. At this period she had only a show; then she had a violent sick stomach and vomiting until February 4th, 1888. Since this time she has had a continuous discharge of pus from her rectum. And up to the time of admission into St. Luke's Hospital she discharged, at different times, 18 or 20 small bones through the rectum. She sleeps poorly, but her appetite is fair.

Such is the account given of the case before she came to St. Luke's, by her husband, who is himself an able physician.

When Mrs. L. entered St. Luke's Hospital, she was very feeble and emaciated, her complexion pale, sallow, and bloodless, and her suffering so intense that she took four grains of morphine a day. She was kept in the Hospital for a week before any attempt was made to remove the fœtus. During this time repeated examinations of the case were held, and every effort made to improve her health.

The anterior abdominal wall was thin and relaxed, and moved freely over the cyst wall. Laparotomy was thought to be more dangerous than any other procedure, and the idea of attempting to remove the fœtus in that way was

abandoned.

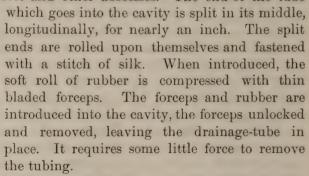
As some bones had been discharged by the rectum, Dr. Hunter McGuire determined to attempt the operation in that direction. The patient being under the full influence of chloroform, he passed his hand into the bowel, and found it communicated with the cyst by an opening barely sufficient to admit two fingers. This opening was at the top of the rectum, a very short distance below the junction of that body with the sigmoid flexure of the colon. The edges of the opening were soft and somewhat dilatable, but not enough so to admit the hand of the operator. The vertex of the head of the child presented fairly at this opening into the gut. The orifice into the bowel was too small to permit the child to pass, unless the opening was enlarged. The fact that the communication between the rectum and cvst was so high up, and the orifice so small. Dr. McGuire determined to abondon the effort in that direction. He dreaded the result of enlarging the orifice by an incision. The patient was very feeble, and could not bear the hæmorrhage which might follow incising a canal so vascular.

The woman was then turned on her side, in Sims' position, a short- but broad-bladed Sims' speculum introduced, and the vaginal walls protected by pieces of bone. An assistant, with his hand on the abdomen, pressed the cyst down until it could readily be felt through Douglas' cul-de-

sac. With the thermo-cautery, heated to a dull red heat, an opening was made into the cyst. This opening was gradually enlarged with the cautery-knife until three fingers could easily pass from the vagina into the cyst, and the child be felt. The decomposing fœtus was then broken up and removed in fragments. The cyst wall was uninjured, and the placenta left in situ. The contents of the cyst were extremely feetid. A large drainage tube, half an inch in diameter, was passed into the cyst through the vagina, and retained there.

Every three or four hours for a week, and less frequently after that time, the cyst was flushed out with a solution of bichloride of mercury (1:4000); afterwards Blair's "Chloral Thymol" (an ounce to a pint of water) was used, because poisoning from the bichloride or a carbolic-acid solution was feared, on account of the large and direct opening from the cyst into the rectum. During the intervals of flushing, the cyst, a large-sized gum condom, was tied to the end of the drainage-tube to catch the discharge, and protect the bed

Dr. McGuire's plan of keeping a drainage-tube in position is very simple, and one he frequently resorts to in the treatment of pelvic and other abscesses. The end of the tube



There was slight or no shock following the operation. Dr. McGuire gives quinine before performing any serious surgical operation, to prevent shock, in the way he has previously



reported.

The recovery of the lady was uninterrupted. In two weeks she was out of bed. In three she left the Hospital.

Two months afterwards, in passing through the city, she came to the Hospital, and was examined. The opening in the rectum was closed, or at least no trace of it could be found. A small sinus, large enough only to admit a small probe, was found in Douglas' cul-de-sac, communicating with the cyst. Her general health had greatly improved, and she had ceased to use morphia.

Gorrespondence.

Deaths from Chloroform—Have You Had Any, or Do You Know of Any? Information Wanted.

[We hope the request contained in the subjoined letter will receive the prompt responses for which it asks. Every practitioner is interested in the result of this inquiry, and should contribute at once any mite of information he may have on the subject. Our readers will in due time receive the result of the investigation. Address all replies to this letter, not to the Editor of this journal, but to Dr. William W. Parker, 1100 East Broad Street, Richmond, Va. The Society is to convene in Norfolk, Va., October 23rd, 1888, and hence all reports ought to be in hand by October 1st, at latest.]

Editor Virginia Medical Monthly:

DEAR SIR,—During the session of the Medical Society of Virginia, October, 1887, I offered the following resolution, which was adopted:

"Resolved, That a Committee of three Fellows be appointed to inquire into, and report to the next annual session of this Society, a record of all deaths known to have occurred within the State of Virginia within the past five years from the administration of chloroform."

I suggested to the President of the Society at the time the name of a Fellow as Chairman of this Committee, and supposed for some time that my suggestion had been adopted. I find, however, on examining the records, that the Committee appointed under this resolution is composed of Drs. Wm. W. Parker, of Richmond, Wm. P. McGuire, of Winchester, and T. M. Bowyer, of Liberty.

I hope it is not too late to ask for the desired information from the medical men of the South as well as of the State of Virginia, for the Committee will take it upon themselves to make the inquiry apply to a wider range of territory than is precisely called for in the resolution. I hope each case to be reported will be selected and reported with care.

My own opinion is that when chloroform kills, it kills directly—not indirectly. It kills while the drug is being taken, and not afterwards. I mean to say that the heart stops, or fails, if it does not stop, *instantly*, while inhalation is going on.

Information from any source will be gladly received by any member of the Committee. Prompt reports will con-

fer a favor upon,

Yours very respectfully, WM. W. PARKER, M. D., Chairman of Committee, 1100 E. Broad St., Richmond, Va. July 20th, 1888.

Original Translations.

From the French. By R. M. SLAUGHTER, M. D., Theological Seminary, Va.

Treatment of Pneumothorax by Injection of Sterilyzed Air.

At a late meeting of the Academy of Medicine of Paris, Prof. Potain reported a case of pneumothorax, which he claims to have cured. The patient, a man of 23, entered his clinic ten months before, with symptoms of tuberculosis of the third degree, complicated with pneumothorax. Physical examination now shows not the slightest trace of phthisis. When Dr. Potain began the treatment with the injection of sterilized air, the pleural effusion had reached as high as the second rib. It was necessary that something should be done, and as all methods which have been tried for curing pneumothorax have proved generally fatal, Dr. Potain determined to practice in the usual manner thoracentesis, and to replace the effusion, as it was drawn off, with sterilized air, so as to prevent sudden expansion of the lungs, as it would be dangerous. The apparatus used for

the introduction of the air consisted of two bottles, of twoquarts capacity, connected by a rubber tube, so that the contents of one might be emptied into the other by a simple siphon mechanism. The first of these bottles was filled with a strong solution of carbolic acid, and connected also with a tube, which had been heated to 200°(C.) and filled with cotton wadding. By lowering the empty bottle, the solution in the first is drawn over and replaced by air which passes in through the cotton in the tube, and is consequently pure. This air passes next through the carbolic solution, and into the pleural cavity through a short, fine needle inserted through the sixth intercostal space. evacuating puncture was made in the seventh space. teen hundred centimetres (rather less than three pints) of fluid were thus drawn off, and the operation was followed by neither fever nor reaction. As was to have been expected, the fluid re-accumulated, and in the course of five months it was necessary to repeat the operation three times, at an interval of one month for the first operation, and of two months between the last.

The utility of sterilized air was clearly shown at the last operation. At this operation he first tried simply the evacuation of the fluid, without replacing it with air, but the patient quickly complained of very acute pain and dyspnæa, which was immediately relieved by the introduction of 600 C.C. of air. The fluid first drawn off was a little purulent, but soon became odorless. This injected air was gradually absorbed, and the fluid reproduced in less quantity each time, until it finally disappeared. The condition of the lung also improved in a remarkable manner; the cough and physical signs disappearing, the expectorations became very scant, and no longer contained bacilli. The general health was as good as could possibly be expected. Dr. Potain cited two other cases cured by the same method.

Dr. Potain gives the following rules for the use of his

method:

(1) In cases of pneumothorax in which there is no dysp.

nœa, surgical intervention should be refrained from.

(2) When air accumulates in the pleural cavity to such an extent as to produce dangerous pressure, then draw off enough to make the pressure equal to or a little less than that of the atmosphere.

(3) When, later, a sero-fibrinous exudation is produced, do not interfere so long as this effusion produces no discomfort through its weight or danger through its volume.

Should this occur, however, the fluid should be removed and replaced by sterilized air, to the extent of maintaining within the pleural cavity the normal pressure. If the effusion is sero-purulent, but not feetid, the same course should be pursued.

(4) If the effusion is purulent and the pus feetid, and the respiration seriously impeded, it is best to use the siphon

drainage tube.

The following are his conclusions:

It is possible to completely evacuate liquid effused into the pleural cavity by substituting in their place sterilyzed air.

This air, freed from all germ by filtering through cotton, is deprived of any deleterious action upon the pleural cavity. This practice removes the great danger resulting from the presence of a larger quantity of fluid in the pleural cavity, or the rapid evacuation of such an effusion.

By it may be avoided by many punctures, and it allows

the lungs to expand gradually.

Finally, it seems, by allowing the diseased lung a period of rest and quiet, to favor the cicatrization and cure of the tubercular lesions.—Le Praticien, 30th April, 1888.

Leucocythemia Considered as Cancer of the Blood.

Dr. A. Descamps (in Lyons Medical and France Médical) states that increase in the number of the white blood corpuscles occurs clinically in two well defined series of cases, called, respectively, leucocystosis and leucocythemia. The first is only a symptom, arising from multiple causes, while the second constitutes a veritable morbid entity, for which no plausible pathogenic hypothesis has yet been put forth, M. Bard tells us, and he considers it as a cancer proper of the blood.

In fact leucocythemia is characterized by an enormous increase in the number of the white globules of the blood (two white globules to one red globule, in a case cited by Robin), and the appearance of a considerable number of globulines—that is to say, of younger bodies—really embryonic leucocytes.

If the comparison be made between the progressive production of these embryonic elements and the white globules, and the clinical knowledge of cancer and its progressively fatal course, an evident connection is to be perceived.

Upon the other hand, the excessive formation of the white blood globules should not be attributed to organs the hypertrophy of which often accompanies the disease (the liver, spleen, kidneys, etc.), for the leucocythemia is established by the hypertrophy of these organs.

The essential characteristics of malignant tumors is an ever-increasing anfl rapid proliferation of the cells of the attacked tissue, and, by the fact itself of the rapidity of multiplication, being constituted by still younger embryonic cells, as arrested in the first steps of their specific development.

Leucocythemia has all these characteristics, and, moreover, like cancer, it has a fatal termination.—Le Praticien,

28th May, 1888. Hyper-Chlorhydria.

Prof. Germain has made another communication to the Academy of Medicine (*Le Progrès Médical*, 5th May, 1888) upon this subject, embodying the results of the latest researches made by himself and Drs. Durand, Fardel, and Mathieu.

He first signalizes the importance of the study of dyspepsia chemically, and of a knowledge of the amount of chlorohydric acid contained in the gastric juice. As has been already indicated, the *puloro-glucine-vanilline* is the best re-

agent for this purpose.

In experiments upon thirteen persons suffering with dilatation and hyper-chlorhydria, it was found that instead of 1.5 parts per 1000 of chlorohydric acid in the gastric juice, there were 3.4 and even 5 parts per 1000. This increased acidity explained the painful spasms of which these patients complained, the burning sensations, and the false feeling of hunger experienced four or five hours after eating.

Dr. Sée insists upon the necessity of chemical confirmation in the differential diagnosis in affections of the stomach and the intestines. The alkalinization of gastric juice should precede all other treatment in these cases; but it is not proper to prescribe at hazard the bicarbonate of sodium. This salt should be given, not before a meal, but four or

five hours after, at which time only can it be useful.

The regimen should be composed of meats and eggs. The use of milk should not be abused, and the farinaceous and green vegetables only cause pain. As to drinks, he advises copious draughts of warm tea.

I have used Succus Alterans (McDade) in my practice ever since it was introduced, and have always found it eminently satisfactory in the treatment of all syphilitic cases of skin diseases and also of all blood disorders.

Analyses, Selections, etc.

[Prepared by M. D. HOGE, JR., M. D., Richmond, Va.]

Therapeutics of Diphtheria.

Dr. A. Jacobi, of New York, N. Y., contributes a paper on this subject to *Progress*, July, 1888, with the discussion before the Philadelphia Medical Society. He starts off with the remark that diphtheria is a contagious disease, and that it probably has no more of a spontaneous origin than cholera or scarlatina. What has been called follicular amygdalitis (or tonsillitis) is diphtheria in many, if not in most cases; but this is seldom dangerous to the patient, because the tonsils have but very little lymph communication with the rest of the body. This variety is one of which adults are apt to suffer, and is prone to last a long time,

and to give rise to repeated attacks.

Hence the pre-eminence of preventive treatment. This consists, first of all, in isolation of the sick. If it be impossible to send well children away, let them remain in the open air during the day, and with open bed-room windows during the night in the most distant part of the house, or during the winter on the lower floor. Do not let them go to school or church, etc. Seek out the unhygienic surroundings of the house which may have caused the disease. Employ no helper with chronic pharyngeal catarrh. In short, employ no assistants, such as nurse, seamstress, hair-dresser, etc., with the slightest suspicious surroundings. During an epidemic, every public place—as school, theatre, etc.—should be treated as if it were a hospital. Inforce disinfection at regular intervals, as of railroad cars, etc., for the germ of diphtheria is as dangerous a passenger as that of variola. The best preventive is to keep the mucous membrane in a healthy condition; for, as a rule, diphtheria will not attack a healthy integument. Catarrh of the mouth, pharynx and nose must be treated in time. Chronic nasal catarrh, with big glands around the neck, often requires but two or three. salt-water injections (1:130) into the nose, and gargling-Adding one per cent. of alum is often useful. ment should be continued weeks, or even months. Nitrate of silver solution spray (1:500) accelerates cure. Tincture of pimpinella saxifraga is certainly an efficient remedy in subacute and chronic pharyngitis and laryngitis. Dilute this tincture (for adults) with equal parts of glycerine and water, and take a teaspoonful of this mixture

every two or three hours, with the proviso that no water be taken soon after. Large tonsils must be resected when there is no diphtheria, as during an epidemic any wound in the mouth is liable to become diphtheritic within a day. From one to four applications of the galvanocautery, under cocaine, to each tonsil, or to the post-nasal space, are usually sufficient for every case of enlarged tonsils or lacunar amygdalitis; but it is best to cauterize but one side at a time, to avoid inconvenience in swallowing, and to burn from the surface inwards. Cauterization from the centre outwards to the surface may result in swelling, pain, and suppuration. Apply the burner cold, and heat it in situ. Nasal catarrh and proliferation of the mucous and submucous tissues less frequently require like treatment. Glandular swellings round the neck must not be allowed. The salutary effect of potassium or sodium chlorate, as a mouth-wash, on the buccal mucous membrane, is a preventive remedy, especially in catarrhal and ulcerous conditions of the oral cavity. It prevents the diphtheritic process from spreading. The dose of potassium chlorate should not exceed 15 grains in 24 hours for an infant a year old, nor over from 20 to 30 grains for a child from 3 to 5 years old, and an adult should not take more than a drachm and a half in 24 hours. Always use small and frequently repeated

When the disease has developed, the treatment has to be on general principles. There is no specific for it. Antifebriles, such as sponging, antipyrin, antifebrin, or carbamide of quinia subcutaneously, may be required; or anticonvulsives, such as chloroform inhalations or chloral rectal injections, may be needed; or a heart stimulant, such as digitalis, strophanthus, or spartein, etc., may be called for from the beginning. To avert renal complications, give plenty of water, such as Poland, Bethesda, Apolinaris for equal to, if not better than any of these, Buffalo Lithia, and resort to milk or farinaceous diet; a few good doses of c: 1)mel, a number of hourly or two-hourly small doses of opium, and nitro-glycerine will often prove beneficial. As local applications to the diphtheritic membranes or sores, he is most pleased with with iodol, or powdered iodoform, or one part with 8 or 10 of [cosmoline or] vaseline. For diphtheritic conjunctivitis, appply small ice-bags or iced cloths, changed every few minutes, and instil a saturated solution of boric acid, with or without atropia. Local applications to the tonsillar and faucial mucous membranes must be

made without violence of any kind. Nasal injections can be made to wash the posterior pharynx and the tonsils sufficiently so as to render other special treatment to the throat useless, and besides it is easier. If local applications to the tonsils are preferable for any reason, brush the membranes with tincture of iodine several times daily, or a drop of rather concentrated carbolic acid. Powdered calomel is not contra-indicated.

To dissolve the membranes, solution of papayotin (1 to 20 parts of water) may be injected, sprayed, or brushed on. Trypsin is employed by others. Papoid is also recommended. Inhalations of steam increase the secretion and liquefies it, and thus aids in throwing off pseudo-membranes. It is more beneficial in tracheo-bronchial diphtheria—the so-called "fibrinous bronchitis." He has kept children for days in small bath-rooms, turning on the hot water, and compelling them to breathe the hot clouds. But in tonsillar diphtheria, moist heat is apt to favor extension of the disease by softening the hitherto healthy mucous membrane. Spirits turpentine, or a teaspoonful of carbolic acid, can be poured on hot water boiling over an alcoholic lamp, and thus be evaporated—impregnating the air of the room with steam and vapors which the patient is compelled to breathe.

Guttmann recommended pilocarpine (or jaborandi) internally as a panacea, because it increases the secretion of the mucous membrane, or the nitrate or muriate of pilocarpine hypodermically; but it is to be remembered that it enfeebles the heart, and hence cannot be long continued. Over the thoroughly moistened mucous membrane thus produced, the pseudo-membrane is more easily made to float and macerate.

Diphtheria of the nose is apt to end fatally unless energetically treated from the commencement by disinfection of the mucous membrane. Use disinfectant injections every hour for a day or more. But there are cases in which the blood-vessels, and not the lymph bodies, are the main gates through which constitutional poisoning takes place; the nasal discharge is more or less sanguineous. Injections are successful where the whole nasal cavity is filled with membranous deposits to such an extent as to require forcible treatment. In such cases, a silver probe, dipped in carbolic acid, or wrapped with absorbent cotton, moistened with carbolic solution (50 or 90 per cent.), may be pushed through it; and after awhile injections alone will suffice. But generally a few hours are enough for the nostrils to become

again blocked, when the same procedure will again be required. Injections should be warm and fairly mild, such as \frac{2}{3}ds of one per cent. solution of sodium chloride, or saturated solutions of boric acid, or 1 part of mercuric bichloride, 56 of sodium chloride, and 5000 of water or limewater, or solutions of papayotin. The object is to get a disinfectant wash. A one per cent. solution of carbolic acid may be used with care, to prevent swallowing, which would prove poisonous. The nozzle of the syringe must be large, blunt, and soft. When the children must not be raised, he uses a spoon or a plain Davidson atomizer. A common glass nozzle can be made large enough to fit the nostril, and blunt and soft enough as well, by slipping over it a piece of India-rubber tubing. The nozzle must be passed in horizontally, and not vertically, and see that fluid runs—not back through the same nostril—but through the other nostril or through the mouth, or is swallowed. The following is the proper procedure: Throw a towel over the child's chest up to the chin; the operator, sitting on the bed, then gently raises the child in bed. He then steadies the child's head against his chest, while somebody holds the hands. The nozzle is then passed in horizontally, and the syringe emptied. When pain results in the ears, use more gentleness, or pour in from a spoon or a minim dropper. It is not cruel to wake a child up once an hour for a day or two to try to save its life from the septic sleep in order to repeat these injections or instillations.

Direct treatment of the swollen neck glands may do some good. Potassium iodide in 3 or 5 parts of glycerine is absorbed; the same in equal parts of water, with a little animal fat, and 6 or 8 times its quantity of lanolin, gives an ointment which is readily absorbed, as shown by the appearance of iodine in the urine in a few hours. Iodoform may be utilized in the same way. Suppuration of these swollen neck glands is ominous, as it is rare, and requires incision and disinfection. As a rule, there is but little pus. But the incisions must be extensive, and the scoop and the concentrated carbolic acid must be freely used. Hæmorrhage sometimes occurs in these cases, and is difficult to control. In these cases avoid carbolic acid, as also solutions of iron; but compression, the actual cautery and acupressure,

have rendered good service.

Strangulation is another danger, to which he only alludes, as Dr. O'Dwyer will deal with that.

Besides sepsis and strangulation, heart failure is a great

danger. It occurs sometimes suddenly, but is generally foreshadowed by gradual increasing frequency and weakness of heart beats and pulse, and the equal length of intervals between feeble systole and diastole, and the diastole and systole. This equality is always dangerous. Besides the usual causes of heart failure in all fevers, it is also due, in diphtheria, to myocardial changes which may depend on the influence of the septic decomposition of the blood, and the ill-nutrition of the heart-muscle depending thereon, or the direct diphtheritic changes of the tissues, or both. Hence whatever enfeebles, even in the slightert degree, must be avoided. Patients must remain in bed, take meals and evacuate bowels, etc., while recumbent. In no disease, except pneumonia, has Dr. Jacobi seen more fatal results from sudden changes of posture. Digitalis, strophanthus, spartein, besides camphor, alcohol, musk, etc., must not be postponed until feebleness and collapse have set in. It is particularly necessary to use some of these heart tonics from the beginning when antifebrin or antipyrin is used. infant a year old will take one-tenth grain of sulphate of spartein four times a day as a precautionary measure, and every hour or two in an emergency.

Alcoholic stimulants in large quantities, amply diluted, are of the greatest importance from the commencement—even in apparently mild cases. There is no such thing as intoxication or danger from alcohol in septic diseases. Use whiskey or brandy according to its stimulant effect. Chil-

dren sometimes require ten or twelve ounces daily.

Coffee is a good heart stimulant. From 5 to 25 grains camphor in the form of camphor water, or in mucilaginous emulsion, will serve well. It does not upset the stomach as ammonium carbonate is liable to do. In emergency, it may be used subcutaneously in five parts of oil, which is milder than ether.

But Siberian musk, in powders or mucilage, is the best internal stimulant in urgent cases. When ten or fifteen grains, given to a child one or two years old, does not restore the satisfactory heart-action, the prognosis is very bad.

During convalescence, paralyses of different anatomical and histological origin, often set in. In all such cases, sustain the heart by digitalis, etc. A three-year old child may take daily, for a month, three grains, or its equivalent, as one grain of the extract. If digestion is not interfered with, use mild preparations of iron and strychnia in addition. A child three years old will stand an eightieth of a grain of

strychnia three or four times daily. Local frictions, massage of the affected parts, electric currents in accordance with established rules are indicated.

Paralysis of the respiratory muscles is quite dangerous by apnea. Electrical currents for short periods, but very frequently, and strychnia sulphate in larger than text-book hypodermic doses, and repeated as often as indicated, will render good service. This practice, besides Sylvester's method of artificial respiration, persevered in for three days,

proved effective in one of his cases.

Chloride of iron is astringent and antiseptic. Its contact with the diseased surface is therefore as important as its general effect. Hence, give it from every quarter of an hour to an hour. A year old infant may take three or four grains a day; a three to five year old child, from eight to twelve grains. Mix it with water so as to make the dose from a half to one teaspoonful. A drachm in four ounces of water allows half a teaspoonful every twenty minutes. No water must be drunk after the medicine. Generally it is well borne. Vomiting and diarrhea are contra-indications to persevering in its use, as these reduce sleep. Glycerine is a better adjuvant than syrups. But as valuable as is chloride of iron, in cases of intense sepsis, it is not powerful enough to prevent the rapid progress of the disease. Where, with naso-pharyngeal diphtheria, we have large glandular swellings, feeble heart, frequent pulse, irritable stomach thorough sepsis, in short—those in which only doses of stimulants, general and cardiac, can possibly promise relief, patients are better off without the iron. Nor is iron sufficient in cases which are pre-eminently laryngeal—in membranous croup.

Mercuric bichloride—from a daily quantity of a quarter to a half grain—in doses of from \$\frac{1}{60}\$th to \$\frac{1}{40}\$th grain given every hour or two, diluted in a tablespoonful of water or milk, acts well, especially in cases of laryngeal diphtheria or fibrinous bronchitis. If it produces intestinal irritation, it is generally found that the solution was as strong as from 1:2000 or 3000. A few minims of paregoric with each dose checks this irritation. Since adopting this treatment, surgical interference (as tracheotomy) has rarely been required. As a rule, such complete stenosis as necessitates surgical interference develops after days only, and this necessity is often obviated by this remedy when given as detailed. Even when intubation or tracheotomy is required, continue the mercuric bichloride—even for ten days or two weeks.

A girl 7 years old, with nasal and pharyngeal diphtheria, cervical adenitis, some laryngeal stenosis, took hourly doses of $\frac{1}{40}$ th bichloride for ten days, and also hourly nasal injections of the same (1 grain to pint)—altogether continued for more than a fortnight, and she got well. In this case, about 20 grains mercuric bichloride entered the stomach, and yet caused but little stomatitis, and hardly any intestinal irritation.

Dr. Wm. Pepper, of Philadelphia, in opening the discussion, remarked that Dr. Jacobi had done good service in warning against the danger of relying too implicitly on trained nurses; and also in warning us that tonsillar hypertrophies, nasal catarrh, etc., may tempt the localization of diphtheria, which disease might have been otherwise escaped. He confirms the extreme value of iodoform in local treatment. Soluble in ether, miscible with glycerine and oils, capable of use as a powder, it is the best of all local applications in any case or condition. As to steam atomizers, used with proper gentleness, the relief to oppression they afford is so soon recognized that we can secure intelligent co-operation in their properly frequent use. His experience confirms the value of mercuric treatment in larvngeal diphtheria, whether primary or descending. He goes further than Dr. Jacobi, and believes he has seen cases of nasal diphtheria yield in a most remarkable way to bichloride treatment; it has seemed to prevent the local spread as well as septic infection. He agrees with Dr. Jacobi, that treatment should begin with large doses of chloride of iron, and that its association with potassium chlorate is comparatively indifferent, but the iron is not generally well borne by the stomach. When it irritates the stomach or bowels, stop the iron abruptly, and substitute mercurials. In threatened heart failure, he urges early administration of strychnia, in preference to digitalis, spartein, ammonia—above everything except alcohol.

Dr. Carl Seiler thinks the addition of potassium chlorate to iron chloride is of great use, but the potash salt alone is of little use. Mixing the two solutions disengages a large amount of chlorine gas. Labbaraque's solution (1 to 5) is also a sufficient disinfectant, which acts well as a spray to the nasal cavities or fauces. The carbolic acid solution should be made saline by bicarbonate of sodium, so that neither exosmosis nor endosmosis takes place. This alkaline solution is soothing, and nicely frees the surfaces of se-

cretions.

Dr. M. Price remarked that to secure evolution of steam lime, simply put a few pieces of lime in a bucket with hot water, place a blanket over the bed, and let the steam pass over the child's head. If a hot stone or hot piece of metal be added to the water every half hour or so, it will keep up the steam without using a stove or fire. Lime vapor lessens the danger of contagion.

Dr. Ewin Rosenthal has resorted in two cases to the sublimation of mercurous chloride from platinum foil; one recovered and one died, but was almost *in extremis* when treat

ment was begun.

Dr. J. Solis-Cohen endorses the recommendation to give early attention to the heart. His experience with chloride of iron topically differs from that of Dr. Jacobi. Where he can properly apply it to the extreme margins of the pseudomembrane, by firm, gentle pressure with a brush or cotton wad, he ranks it as the most serviceable agent he has used. The drug astringes and disinfects, and helps to detach the false membrane, and prevents extension of infection. He confirms what Dr. Jacobi claims for the internal use of iron chloride, as also of bichloride of mercury. Empirics long ago taught us the pre-eminent value of chlorine compounds in general in the treatment of diphtheria; and chlorides of mercury internally—more particularly calomel—have long been praised for membranous laryngitis. Steam also is very important. Use inhalations also of lime vapor. Inhalations of large doses of carbolic acid in the spray of a steam atomizer—20 to 25 grains to water 5j. Spray of this from 5ss to 5j into the throat every hour, or even half hour, until commencing olive discoloration of urine gives evidence of saturation; then stop the remedy until the urine clears up. This seems to disinfect the system, and thereby improves the local condition, and at the same time prevents or diminishes the danger of systemic sepsis.

Dr. Jacobi remarked that slaking lime is the only way to utilize it. Lime-water spray is useless; but in slaking, a large amount is carried up into the air and air-passages. He does not adopt the view of Dr. Cohen, to use carbolic acid spray until discoloration of the urine is noticed. Diphtheria is the very disease in which no complication should be allowed to exist. Besides, young infants are sometimes

poisoned by very small quantities.

Dr. O'Dwyer and others spoke most favorably of intubation, but it was chiefly to report Dr. Jacobi's paper on *medical* treatment of diphtheria that the contribution was made to the pages of *Progress*.

The New Hypnotism-Its Methods and its Possibilities.

Such is the title of a clinical lecture by Dr. C. L. Dana. of New York, published in the North Carolina Medical Journal, June, 1888. By adopting Burnheim's (of Nancy, France) method, we can accomplish in a safe and rational way all that is done by mind curers, etc. Charcot's observations were mostly on hysterical subjects, and consequently taught hypnotism in a misleading way. His hypnotism differs in methods, theory and practical applications from that practised by Bernheim and Liebeante. Charcot's method consisted in getting the patient to fix her eyes upon a bright object until she passed off into a hypnotic sleep. Bernheim's "persuasive" or "suggestive method" is thus: Place the patient in a chair in front of the operator, who talks to the patient in a firm and confident voice, assuring him that he will go to sleep in a short time if he will make no resistance; that the sleep will be natural, etc. The operator then, with the same confident voice, tells the patient that he is becoming drowsy; that his eyes are heavy; objects look confused; that his lids are falling, and that they are closed; and in a moment more the patient goes off to sleep. This method may fail the first time, and succeed the second. It requires from about five to fifteen minutes. Charcot's method sometimes throws nervous persons into hysterical spasms, but the suggestive method has no such injurious after-effects. Bernheim and Liebeante hypnotize 90 per cent. This form of sleep occurs in healthy persons. Children and highly excitable, hysterical and insane persons are less easily affected. Children up to 14 years of age are very susceptible; after 55 years of age susceptibility lessens. Men are almost as easily affected as women by this suggestive method. The three conditions essential in hypnotism are (1) suspension of will power. (2) automatic response to suggestion; (3) concentration of mental force in various directions. By the suggestive method—by telling patients, while under the hypnotic influence, that they will have no more rheumatic pains, no more neuralgia; that their menses will be regular; that they will give up drinking, the use of tobacco; will sleep regularly; that the trembling or paralysis will grow less—do this on several occasions, and in a large per cent. of cases you will relieve or cure fractional or diathesic disorders. But be careful not to use this method in hysterical women, imbeciles, or the insane, or wherethere is a malignant disease. With these precautions you can accomplish by this method of hypnotism the same results that the "mind curers" and "Christian scientists" do. Watch the effect upon persons upon whom you try hypnotism. Hypnotism ought not to be used in private parlors.

Invasions of Surgery

Is the title of a well prepared report on surgery made by Dr. Paul B. Barringer, of Davidson College, N. C., to the Medical Society of North Carolina, May, 1888 (N. C. Med. Jour., June, 1888). The three "invasions" made during the preceding year, to which he limits his paper, are (1) opening and digital exploration of the pericardial cavity by Stezner; (2) removal of the left lobe of the liver by Langenbeck; (3) the removal of a tumor from the spinal cord by Victor

Horsley.

(1) Student made a successful attempt to drive a sewing needle into the heart. Serious symptoms began twelve hours after, when pain in the region, difficulty of breathing, and a loud pericardial murmur at the apex developed. After 36 hours later, the symptoms increased so in severity that an operation was decided on. Stezner resected a piece of the fifth rib, opened the left pleural cavity, and then the pericardium, when about a teaspoonful of cloudy pericardial fluid ran out. The needle was now felt lying diagonally in the right ventricle. Its head was then driven out through the anterior cardiac wall, and fixed in this position with the finger-nail. The violent, irregular heart-contractions made it so difficult to catch the needle that in the attempt to catch it with the forceps, the needle slipped back into the ventricle, where it assumed a vertical position; an iodoform tampon used to plug up the hole in the pleura was also drawn into the cavity by a deep respiratory effort, and could not be found afterwards. The wound was thoroughly tamponed, and the patient was well in four weeks, although in the mean time there was severe pneumothorax, with copious exudation. There is now no heart murmur, nor abnormal pulse, nor a trace of pleural exudation; and of course no one can tell where the needle is.

(2) Owing to congestive hyperplasia, resulting from impeded circulation, the liver was heavy, but movable, and caused intolerable distress, especially in the dorsal decubitus. Diagnosis was made by exploratory incisions. The hinge-like attachment to the body of the liver was ligated in sections by Langenbeck, and the constricted portion, weighing about one pound, was removed. The same evening, symptoms of internal hæmorrhage occurred; the ab-

dominal cavity was re-opened, the bleeding checked, the blood removed by sponging, and the wound closed. Healing was prompt, but ascites, followed by general ædema, followed. The abdomen was twice tapped, when the pa-

tient went on to a good recovery.

(3) Patient for three years suffered severe pain, most intense just below and inside the scapular angle, accompanied by loss of motion and sensation below that level. The upper border of the anæsthesia was in the region of the fifth left intercostal nerve; on the right side of it was less distinctly defined, but did not extend higher. Horsley diagnosed all the symptoms as the result of the tumor of the spinal cord. Accordingly, he removed the spine and parts of the laminæ of the fifth, fourth and third dorsal vertebræ, when a small oval myxoma, compressing and making a deep impression on the left side of the spinal cord below the third vertebra, came into view. It was easily shelled out, and under careful antiseptic treatment the temperature did not rise more than 1°F. The wound healed readily, except at the upper part, where a drain was left in, by which a little cerebrospinal fluid flowed away. After three or four weeks, the acute pain gradually and intermittently decreased, and after seven months was entirely gone, and the sensation and motion of the body and legs were almost natural.

Remarkable Hyper-Pyrexia in Malarial Disease.

Dr. N. B, Herring, of Wilson, N. C., reports (N. C. Med. Jour., June, 1888) the case of his daughter—at Hollin's Institute, Va.—the axillary temperature ranging from 97°F. (second chill) to 109° in an hour and a half afterwards. During the third chill (about two hours later) the temperature fell again to 97°, but in an hour it ran up to "more than 115°[?] This rapidly fell in five minutes to 113.5°; in five minutes more to 105°; in five minutes to 100.8°, and in two hours more wild delirium had set in, with a temperature of only 60°[?]. All sorts of irregularities of temperature occurred after this, and all sorts of treatment were recommended; but finally quinine gained the mastery—taking from January 14th to time of report, May 8th, six thousand grains of quinine sulphate, about 75 grains a day for 114 days, and was still using 30 a day, and is getting well. Dr. R. T. Styll, of Hollins, Va., also attended her. [Is it possible that the temperature change of 55°F. could have occurred in less than three hours without death? Is there not some error of print or of observation?—Editor.

The Address of President of Medical Society of North Carolina

Appears in the June No., 1888, of the North Carolina Medical Journal, but by an oversight the name of the President is left out. The author of this address is Dr. T. D. Haigh, of Favetteville, N. C. The address deals with matters mostly of State interest; but among remarks of general interest, he says: "Only men of cultivated minds can grasp the questions which the advanced thinkers are continually bringing before them. No longer can the boy be taken from the plow, with only a smattering of English and arithmetic, and after a term of two years, go forth to the work that is required of the physican of the present day." "In our profession the world is demanding a complete classical course, collegiate or its equivalent, before one shall enter on that which we term a strictly medical course." The addressmakes a strong appeal for that sterling journal of his State —the North Carolina Medical Journal.

Endemic of Diarrhœa.

Dr. Thos. P. D. Pound, of Wilsonville, Ky., writes to the (Southwestern Medical Gazette, June, 1888) on the above supject. One of his patients thinking she was bilious took a dose of calcmel, but this ran off at once, and for five days she had a number of large slaty looking and offensive smelling evacuations from the bowels. A grandson who had been sleeping with her was affected in the same way. The next day a daughter of the lady had a similar attack. Then the neighbors on the adjoining farm were taken down, making in all nine cases. In some of them calomel was taken, which only aggravated the symptoms. Quinine and astringents gave the best results. On a careful examination, nothing could be found which seemed a probable cause.

Placenta Prævia.

Dr. H. M. Smith, of Vincennes, Ind., read a paper on this subject before the Mitchell Medical Society and is reported in the Southwestern Medical Gazette, June, 1888. It is a rare and fatal accident. Having been called suddenly to a case of profuse hæmorrhage, he found a mother at full term, with dilated os and placenta prævia. Not adopting the recommendations of Simpson, he passed his hand through, seized a foot, and after great difficulty brought the child through the vulva. Ergot was administered, and next the uterus washed out with carbolic acid and hot water. Pulse 110; temperature 100°. The treatment was stimulants and dis-

infectants. For a few days the child had fever and symptoms of shock to the nervous system, due to the severe traction.

Massage in Nervous Diseases.

Dr. T. B. Greenly, of West Point, Ky., is reported in the Southwestern Medical Gazette, June, 1888, as follows: The tendency of late years is to treat nervous diseases more by physical means and less by medicine. Dr. Weir Mitchell, of Philadelphia, was the first to introduce massage into this country. This treatment is confined to cases in which there is little or no organic lesion, such as hysteria, migraine, peripheral paralysis, etc. Massage consists of a process of kneading, pressing, stroking, rubbing, hocking and percussion when applied to muscles for the propulsion of blood lymph and exudations from the periphery towards the centre. Dr. Ling, a Swedish physician, instituted the "movement cure," which he divided into active and passive. These two plans are often advantageously combined and even supplemented by electricity.

Laparotomy.

Dr. J. S. Nowlin, Shelbyville, Tenn., publishes a paper in the Southern Practitioner, July, 1888. Laparotomy may refer to any incision through the abdominal wall. The two chief dangers are shock and peritonitis which may by handling become septic. The shock is due to exposure of the viscera and peritoneum to the atmosphere. The mortality as shown by Ashurst is not always due to shock and peritonitis, but in some cases to the treatment of the organs within the cavity. For herniotomy one of the best antiseptic solutions is that recommended by Theirch.

R. Boric acidgrs. iv Salicylic acidgr. j Water5i.

In penetrating wounds of the abdominal wall the argument in favor of operative interference may be briefly stated in the words of Wyeth: "First. The enlargement of a wound sufficiently to demonstrate that it does not open the cavity of the peritoneum, is a simple procedure and practically without danger."

"Second. A wound of the peritoneal cavity left without surgical interference is always attended with great danger, either from hæmorrhage immediately, or from peritonitis at

a later period."

"Third. If the alimentary canal is opened (by the penetrating wound) death is almost inevitable."

The Tripod of Life.

Dr. J. B. Chisholm, Franklin, Kv. (Southern Practitioner, July, 1888,) says that the perpetuation of animal life depends upon the triple forces residing in the heart, brain and lungs. Death occurs directly or indirectly as a sequence of the disturbance of this equipoise of vital forces. happens that we are in doubt as to the exact manner of dying, whether it be due chiefly to coma, asphyxia or syncope. As a matter of fact the solution of the question of death is of less importance than the preservation of this equipoise of forces during life. The civilization which furnishes this condition is the one best adapted to prolongation of life. The undue stimulation of brain and nervous force by our present method is the horn of the dilemma which merits consideration. Within certain limits, brain and nervous action are strictly physiological, and invigoration of nervous tissue is the result. With our present mode of living, how long it may require to convert us into a nation of madmen, God only knows. To-day all our brain force is used in thinking and feeling until the sympathetic system calls in vain for more power to carry on organic life. With the present order, a system of gymnastics rigidly enforced accompanied by mental relaxation seems to offer our most reasonable hope. Something may be done by practical therapeutics, including nervines, tonics and electricity.

Medical Education.

Dr. J. W. Davis, of Smyrna, Tenn., criticises in the Southern Practitioner, June, 1888, Dr. A. Y. P. Garnett's address in Cincinnati, as follows: He takes the rag off the bush in demanding four years medical study and then, as if he had no confidence in our teachers, he further wants a set of medical examiners for each county; if he had seven for each, that would give the State of Tennessee seven hundred examiners. We all wish to elevate medical education, but not by law, in free America. Dr. Garnett's whole plea is impracticable and unnecessary. We are too poor. Four years study would cost a young man quite \$4,000. Away with all such tomfoolery as that of Dr. Garnett. [Will Dr. Davis suggest a plan that is practicable "in free America" that will elevate medical education? He admits the he wishes to elevate the standard, but suggests no means of accomplish-

ment. Dr. Garnett suggests a practicable way; Dr. Davis does not. Dr. Garnett's suggestion may be faulty in some of its details, but these could be more easily corrected as experience and observation may require than to attempt to build with nothing at hand with which to build. Dr. Garnett may have been an enthusiast; but Dr. Davis is an obstructionist, and it is from such "tomfoolery" that the progressive profession has more to fear than from enthusiasts. Perhaps Dr. Davis does not agree with the sentiments expressed by Dr. Haigh, in his recent "Address as President of the Medical Society of North Carolina," quoted on another page of these Analyses, Selections, etc., in this number of the Virginia Medical Monthly. But other practitioners do agree with him. Editor.]

Perforating Ulcer of the Bladder.

Dr. S. D. Thurston, of Dallas, Texas, writes to the Texas Courier-Record of Medicine, June, 1888, on this subject. Mrs. T., previously healthy, had a fall from her carriage, followed by several weeks of lameness. On a careful examination. no bones were fractured; but there was concussion of the spine. This passed away, and she was left with irritability of the bladder, and loss of power of retention. A thorough examination, with the finger introduced into the bladder. gave no pathological evidence of disease. The urine was pure and normal. The only means of relief was found in dilating the urethra and allowing the urine to escape without any effort on her part; but there was no improvement in the disease. She was sent to New York to have an artificial vesico-vaginal fistula made, but on reaching the city this was declined. She returned home in a few months no better, and in two months she died of chronic perforating ulcer of the bladder. The autopsy revealed a perforating ulcer in the posterior wall of the fundus. It was circular in form. The outer opening was shut off from the peritoneal cavity by adhesive inflammation of the peritoneum. The bladder was hypertrophied to such an extent that it would hold only about an ounce of fluid. All the other organs were healthy. If the operation of artificial fistula had been performed in time, before the walls had become thickened, it would have no doubt resulted in a complete cure.

Acute Diarrhœa.

Dr. E. T. Boyd, of Roy, Texas, writes to the Texas Courier-Record of Medicine, July, 1888, that there is a diversity of

opinion as to its causes, some claiming that it is only a symptomatic manifestation, and others a distinct disease; and admitting the latter, there is still uncertainty as to the situation of the lesions. In acute diarrhœa we find the inflammation of the large and small intestines between the Pever's patches, as in typhoid fever. In diphtheritic dysentery, with intense inflammation of the large intestines, the smaller present changes as just described. The peritoneum corresponding to the area of involved mucous membrane is often hyperæmic. The color of the intestinal patches vary from pale pink to deep red or livid purple, due, first, to engorgement of the small veins and capillaries with blood; second, to transudation of coloring matter of the blood; and third, to actual hemorrhage into the mucous and submucous coats. The diseased membrane is generally covered with a glairy mucus; rarely is it covered with a muco-purulent secretion. When the disease has lasted several weeks the bright red color of the patches assume a mahogany brown, slate or green color.

The symptoms of this disease are looseness of the bowels accompanied by pain or flatulence, which last a few days' and readily recovers without medical aid. In some cases' fever may be present, with some tenderness of the abdomen. According to the character of the stools, we speak of diarrhea as feculent, serous, mucous or bilious. The variation in color is due to medicine such as calomel, bismuth or iron, or to food, as coffee, spinach, etc. The stools contain chemically large quantities of albumen, red blood-corpuscles, debris of food, pus-corpuscles, triple-phosphates of ammonia and magnesia, epithelial cells from the intestinal membrane,

and a variety of low vegetable forms.

The diet of the patient should be simple, digestible and nutritious. It is preferable to give small quantities of food frequently; cathartics, to relieve the bowels of any irritating substances; bismuth, which coats mechanically the inflamed surfaces, and acts also as a sedative. To cheek secretions, robus villosus, catechu, krameria, kino, acetate of lead, nitrate of silver, and sulphate of copper. If there is much pain, opium is indicated.

Paralysis of the Heart-Perinephritic Abscess-Placenta Prævia.

Dr. G. G. Roy, Atlanta, Ga., publishes in the Southern Medical Record, July, 1888, three cases:

A girl, aged twelve years, in attempting to cross the track in front of an engine, got her right foot and ankle badly crushed, and amputation was found necessary. The child lived in a dirty, squalid hut, with unhealthy surroundings. She had sloughing of the flaps and erysipelas of the limb. From the date of the operation it was found necessary to give her a small quantity of an anæsthetic, the A. C. E being used at each daily dressing of the limb. Sixty days after the operation the usual quantity of chloroform was given, but, on looking up, the doctor found her very pale, irregular breathing, and small pulse. Artificial respiration was resorted to, but she died very suddenly. The only explanation of the heart paralysis is that the long daily use of the anæsthetic had gradually weakened the heart, until on a fatal occasion it arrived at a point when it could no longer stand the strain.

Mrs. G., after a week's confinement to bed, complained of fever, rigors, and sweating on the left side in the region of the kidneys. The formation of an abscess was apparent. A deep incision was made through the lateral abdominal wall, which gave exit to a large quantity of pus. A drainage tube was inserted, and there was a free flow for some weeks. The abscess continued to discharge for eight weeks, when it Her general health has been vastly imfinally ceased. proved.

Dr. Roy was called to see a lady, and found a placenta prævia centralis completely covering the os, which was soft. Up to this time she had had no pains. A few hours later he was summoned, and found the pains had commenced. and there was a breech presentation. This came down wedge-shaped, which prevented any hæmorrhage. The next pain brought away a dead fœtus. She made a good recov-

ery.

Spoon-Handle Obsterric Forceps.

Dr. John Stainback Wilson, Atlanta, Ga., in the Southern Medical Record, July, 1888, relates the following: Soon after the war, he lived in a country region in Texas. He was called to see a robust young mother suffering violently from puerperal convulsions. The pains had ceased entirely, and there was nothing to do but deliver. Some miles away lived a brother practitioner, to whom he sent for forceps and advice. After some delay he came, but without his forceps. Both agreed that delivery alone could save the mother, but how, was the question. Dr. Wilson found in the kitchen two tablespoons. They were made of pewter, or some composition metal, and could be bent without much difficulty.

The handles were bent at an angle of 45 degrees about two inches from the end. The two handles were hooked on each side of the occipital protuberance, the assistant holding the bowl part of the spoon and Dr. Wilson the other. Then, each approximating his hand to the side of the head, sufficient pressure was made to prevent slipping, and then, drawing in concert, the patient was delivered with the first effort.

Electrolysis in Stricture.

Dr. J. J. Berry, Portsmouth, N. H. (Southern Medical Record, July, 1888) says that few who have had any experience with this mode of treating strictures will be inclined to deny its value, yet, like all other methods, it is not of universal application. Much depends on the skill and experience of the operator. With the common battery it is at times exceedingly difficult to estimate the exact strength of the current. The operation will often fail in those cases where there is extensive deposit of inflammatory material. The passage of a stricture by electrolysis enables one to practise subsequent dilatation with greater ease and success. Thin, annular strictures seem to be especially adapted to this method, and would without doubt yield to electricity. It is, however, worthy of trial in all cases, as the procedure is painless and devoid of all danger.

Nephrectomy.

Dr. R. B. Nall, Memphis, Tenn. (Memphis Med. Monthly, July, 1888), reports the case of a patient who, twelve years ago, received a severe wound from a base-ball, just over the left kidney. For a week after the injury his urine was heavily charged with blood. This in time ceased, but he had pain in this region after violent exercise. This pain gradually increased as pus formation went on, and he sought medical advice. He suffered from violent cystitis, and his urine at times would be about one-third pus. On examination, there was considerable bulging of the left kidney region. The case was at once diagnosed as suppurative pvelitis, and removal of the diseased organ was advised. An incision four inches long was made from the crest of the ileum to the last rib. All bleeding vessels were tied as the operation progressed. The cortical substance of the kidney was now divided through its entire convexity, and an enormous quantity of pus escaped. No stone was found in the pelvis. All of the broken-down kidney mass was removed,

except a hard, fibrous portion, about two inches long and the thickness of two fingers, which was firmly adherent to the colon. This was stitched to the wound, and in about a week came away. A drainage-tube was inserted, the wound sutured with silk, and antiseptic lint placed over all. There was no shock. One day the temperature rose to 101°. The wound finally healed, leaving only a small white cicatrix, and the man, three months after the operation, resumed his work as a cooper.

Hysteria.

Dr. A. B. Holder, Crow Agency, Montana, reports the case (Memphis Medical Monthly, July, 1888) of a young woman who was thrown from a pony and fell on her buttocks. Friends hastily carried her in the house. An examination was at once made, but only a slight bruise on the left of the spine was found. There was no paralysis of sensation or motion. The next day she complained of great pain, rigors and heat, without any assignable cause. She received bromide of potash, valerian and henbane, and slept well that night. Three days later she sat up, and the next was walking about. This case is interesting from the relation of hysteria to the accident. Hysteria was caused by a fall from a horse. Was it the mental or physical shock?—fright of the fall, or caused by spinal concussion?

Carbolic Acid Treatment of Typhoid Fever.

According to the *Medical Press*, July 18th, 1888, Dr. Gramshaw's discovery as regards the treatment of typhoid fever is something wonderful. In seven years, he has treated 116 cases of this fever, and had only one death—and this death was probably due to some accidental trouble—after using the following:

M. S.—Take an ounce every four hours.

The good is manifested almost immediately. Temperature falls, pulse moderates and diarrhea ceases. This treatment is evidently based on germicidal theories, though the strength mentioned, when mixed with the gastric and intestinal secretions, does not seem to be enough to interfere with typhoid microbes. The proof of the good, however, turns on the results obtained, which are given above.

Summer Complaint.

Dr. W. I. Thaver, of Brooklyn, N. Y., says (Med. Herald, July, 1888) where there is considerable dental irritation, instead of cutting the gums, he alternates the use of belladonna and phytolacca decandra every one or two hours as seems indicated. A drop of [tincture of?] belladonna in half a tumbler of water for a child under 15 months with hot, red face and threatened convulsions will relieve the dental irritation and cerebral congestion. Phytolacca is indicated where there is ptyalism and irresistible desire to bite the teeth together. When vomiting and diarrhea have continued for some time, opium in minimum doses may be given, but always with great caution. The solid form of opium is best to be given by the mouth, or it may be used hypodermically, or as a clyster or suppository. As the disease is so rapidly fatal by exhaustion because of the frequent discharges and impression upon the nervous system, proper feeding is called for from the very beginning. Rice and barley water contain very little nourishment, and, besides, the pancreas and intestinal juices of children under fifteen months of age do not furnish enough amyolitic ferments to digest these starches. Cow's milk is out of the question, unless partly pre-digested, on account of the tough casein in its composition; even well children under two years old have difficulty to digest this easein. The percentage of casein in cow's milk is 3.022; in mother's milk, not over 1.046, and yet this latter is more casein than a cholera infantum patient can possibly digest. Besides, cow's milk casein is heavier, denser and more unvielding in quality than that of human milk. But "mixed food," such as is represented in "Carnrick's soluble food," meets the indication. This consists partly of pre-digested cow's milk which has been sterilized by dessication, and partly of wheat starch which also has been partly pre-digested by the conversion of the raw starch into dexerine. The addition of one molecule of water converts this starch into a soluble sugar which is ready for immediate absorption. Malt foods are contraindicated because of their laxative qualities. If the stools or vomitings are sour, add a small quantity of lime water to the Carnrick food. When the pulse sinks or becomes irregular, and the skin cold, give carbonate of ammonia or brandy; or if collapse threatens [tincture of] camphor in a few drops of water assists materially in reviving the sinking energies. A few drops of lime water administered by spoon will be of great service in correcting the sour ferments in

the bowels. Hourly and half hourly feeding of small quantities of the kind of food suggested is vastly more beneficial than larger amounts at longer intervals.

Coffee in Typhoid Fever.

Dr. W. A. Cosick, Oregon (Southern Medical Record, July, 1888), remarks that there appeared in a recent journal an observation by Dr. Herr as to the possible relation of the use of coffee to typhoid fever. The subject is of some interest, as the author is convinced that, while coffee may not be an antiseptic proper, it is unquestionably an antiferment, and (when rightly prepared) has a salutary effect on the intestinal tract by preventing gaseous formations, and a stimulant and tonic effect on the nerve filaments. It becomes a corrector of intestinal secretions, and in this way may be considered, to a certain extent, a preventive of typhoid fever. Dr. Cusick, in a practise of twenty-five years, has never observed a fatal issue in patients who drank coffee freely.

Endo-Cardial Sounds and Murmurs.

Dr. John B. Knight, of Louisville, Ky., says (Progress, July, 1888) cardiac action has nothing to do with the second sound of the heart. Activity of this organ starts in the auricular walls. During the diastole (period of heart-rest) the four chambers are moderately filled with blood, and the mitral and tricuspid valves are open, have been open since the termination of the preceding ventricular systole, and remain open until the end of the auricular systole. This auricular systole takes about one-fifth of the time of a cardiac cycle, but is inaudible. The wave of contraction, begun in the auricles, extends to the end of the ventricles with no intermission. This ventricular contraction occupies about twofifths of the time of a cardiac contraction. The instant ventricular contraction begins, the auriculo-ventricular valves close and semilunar valves open. Hence the semilunar valves are open two fifths of the time. During this ventricular contraction there is a sound—the first sound of the heart—a sound that occurs when the thoracic wall is removed; hence it cannot be due to the impulse against the thoracic wall. Several other theories are considered and disproved, except that this sound is due to the vibrations of the chordx tending when made highly tense by the rush of blood over them. This sound is soft (muffled), of low pitch, and ceases the instant the chorde tendine are relaxed. During the ventricular systole the auricles are resting, as well as

during the other two-fifths of the cardiac cycle; so that the auricles rest four-fifths of a cardiac cycle. The seat of the second sound is cardiac, but its cause is without. The aorta and pulmonary arteries contain yellow elastic tissue in their walls. When the ventricles contract, the ongoing blood causes distension of the aorta and pulmonary arteries. The moment the ventricular contraction stops, these tubes rebound on their contained blood. If the semilunar valves are obliterated, this rebounding forces the blood, in part at least, into the ventricles; but if these semilunar valves are healthy, this same rebounding of the aorta and pulmonary arteries causes the blood to close these valves with a snap, as the slamming of a door by a gust of wind. This closing of the semilunar valves, then, causes the sharp, gutck, characteristic second sound of the heart. The second sound is very brief and of high pitch, and is heard when the heart is in

complete diastole.

In endo-carditis the murmurs are essentially systolic, unless valvular lesion co-exists. In this disease the inflammatory exudation is on, in and beneath the endo-cardium, and thickens it. As it covers both sides of the valves, they become so thickened as not to open and close kindly, and causes stenosis of the auriculo-ventricular orifice. Hence the pre-systolic or auriculo-systolic murmur. The same condition of the aortic and pulmonary valves gives real systolic murmurs. In mitral stenosis we have a pre systolic, or what is the same, an auriculo-systolic murmur. It is heard before the first sound. In a ortic stenosis the murmur is wholly systolic, provided the integrity of the semilunar valves is preserved; otherwise the systolic murmur may be immediately followed by a diastolic one. In aortic regurgitation is always diastolic—never systolic. The second sound is not so well heard, because (1) it is not produced, and (2) what is present is masked by the murmur, which is apt to last until the next ventricular contraction.

Radical Cure of Pterygium.

Dr. Dudley S. Revnolds, of Louisville, Ky., has devised the following plan (Progress, July, 1888) for the radical cure of ptervgia: Tear off the apex of the ptervgium from the surface of the cornea; if any small portions remain adherent, shave them off carefully with a cataract knife. It is better to cut into the proper substance of the cornea, removing a small portion of unimplicated tissue, than to leave even one abnormal connective tissue fiber on the surface; for this will certainly undergo contraction. The next step is, divide the normal from the abnormal connective tissue fiber along the margins of the morbid growth, down to the base. Then seizing the apex of the growth with the forceps. the loose connective tissue which holds it to the surface of the ocular fascia may be severed with scissors. A free flow of blood is auspicious. The conjunctiva may then be stitched together, and a circular incision made both above and below, corresponding to the corneo-scleral juncture, for the distance of a quarter of an inch from the line of union sought to be established by the sutures. Radiary incisions should then be made in the vertical meridian sufficiently to allow the ocular conjunctiva to stretch freely over the surface without having it thrown into folds. Incisions may be made at right angles to the line of union at the base of the ptervgium, to relieve tension at this point. The ptervgium itself should be allowed to lie undisturbed in its basillar attachments. The sutures will come away from the conjunctiva in three or four days at most, when good union will be found to have occurred along the whole line, while the pterygium itself undergoes rapid shrinkage, and disappears by the resorption of its constituent elements. This character of operation may be applicable to all forms of pterygia. Having practised the operation for more than fifteen years, and never having witnessed a return of the growth at the site of its original development, he is persuaded this method is entitled to rank as a radical cure of ptervgia.

Dr. S. H. Charlton, of Seymore, recently saw a case that yielded very promptly to the use of a collyrium of the sulphate of zinc, one grain to the ounce of water, instilled every four hours. In two weeks he discharged the patient entirely

cured.

Dr. Reynolds does not like any other material for sutures so well as common white sewing-silk, washed in an aqueous solution of carbolic acid, half drachm to the ounce of distilled water. Prof. Hirschberg's fine catgut softens and forms large nodules on the surface of the conjunctiva, which require several weeks to disappear by absorption. The silk sutures either cut out and come away in three or four days, or they may be easily removed at any time after 48 hours. As for the medicinal treatment of pterygia, there is no rational plan. The late Prof. Bell, of Louisville, used to say of Asiatic cholera, "If the patient gets well, you may be sure it was not a case of cholera." So with the treatment of pterygia by collyria; if recovery follows, you may be sure it was not pterygium.

Ten Aphorisms in Summer Complaint

Is the title of a lecture by Dr. John A. Larrabee, of Lo is-

ville, Ky., in Progress, July, 1888. They are—

1. Causes: Very high temperature enfeebles the digestive organs; over-feeding makes an additional demand on their functions; and micro-organisms find a favorable nidus in the vitiated air, filthy gutters and intestinal ingesta.

2. More apt to attack infants in their second summer, not so much because of teething, as because the infant is less

liable to introduction of germs while nursing.

3. Putrescent odor of alvine dejections guide treatment: Disinfect intestinal tract. Antiseptics internally at once

arrest these diarrheas and restore health.

- 4. Free cool-water bathing and sponging invigorates the child, and in hot weather prevents indigestion and cures thermal diarrheas. This rule is good also for nursing mothers.
- 5. Clothing during heated term: Sleeveless woolen gauze flannel shirt reaching from the neck to hips, covering vital organs. Over this, a loose slip of thin fabric should reach the feet; no skirt.

6. Nursing mothers must not be surfeited with heat, food or clothing. Avoid excitements of mind or body, and take frequent car or boat rides with their infants. A sunrise

drive often dispels approaching illness.

7. Sterilize all food of bottle-fed babies by boiling, and then hermetically seal it until used. By complying with this rule, and attending to clothing and hygiene, "summer complaints" are impossible.

8. Astringents are of questionable value; and avoid mix-

tures containing opium, as they produce meningitis.

9. Barley-water, slightly salted with sodium phosphate, is the best drink when supplemental food is required; add white of egg, if needed, to prevent nausea. In acute indi-

gestion, let barley-water be the only food.

10. The physician, and not the druggist, should receive the first notification of an infant with diarrhæa or cholera morbus. Physicians should refuse to take charge of cases rendered moribund by narcotics, as paregoric, laudanum and chalk mixtures, as they are sure to die.

[Singularly, the aphorism as to what treatment to pursue when the disease is on is not referred to. Suitable doses of calomel to change complexion of bowel discharges from white to yellow or green are good, along with bismuth, tur-

pentine mixtures, etc., as required.—Ep.1

Intubation Tubes.

Dr. Joseph O'Dwyer, of New York, before reading his paper before the Philadelphia Medical Society, in May, (reported in *Progress*, July, 1888,) exhibited tubes with a metallic attachment to replace the epiglottis in swallowing, one of them being so arranged with a spring that a finger might be introduced behind it as an extractor. A tube was exhibited *in situ* in a three-year-old larynx, showing that if a proper size tube for the age be employed, the tube cannot

slip through into the trachea, as some have feared.

In the beginning of his paper he remarks that the diameter of the lumen of the trachea at a year old is scarcely a quarter of an inch; but an adult, while at rest, can breathe comfortably through an opening of this size. In his early experiments with intubation, his tubes had about the same calibre as those generally used for the trachea; and to avoid injuring the vocal cords, he gave the tubes the oval or elliptical form. He was not then aware of the hour-glass contraction that exists just below the vocal bands. To remedy the defect, he has diminished the long diameter at the expense of the lumen of the tube; hence the calibre of the tubes now contracted is probably less than half the original dimensions. The bore of the smallest tube (cylindrical), intended for infants a vear old and younger, is one-eighth of an inch in diameter. The subglottic part of the larynx being surrounded by cartilage is not subject to variations in the normal condition, while the chink of the glottis may be greater or less according to the position of the vocal cords. In the adult the diameter of the lower division of the larvnx is from one-eighth to three-sixteenths of an inch less than that of the trachea, which reduces the breathing capacity about a third. In children the disparity is greater.

After an experience with various size tubes in over 200 cases of croup, besides other forms of stenosis in children, Dr. O'Dwyer is convinced that, as at present constructed, the tubes afford ample room for perfect respiration. When diphtheria is confined to the larynx and upper portion of the trachea, after the subsidence of the coughing paroxysm that immediately follows intubation, the little patient often breathes so quietly that it is sometimes difficult to persuade the mother that the child is living. Such complete freedom of respiration would be impossible if the opening were too

small.

If any dyspnœa whatever remain for any considerable length of time after intubation, or if the respiration be much

above the normal in frequency, it indicates the presence of some complication or extension of the disease below the tube.

In explanation of the manner in which the mechanism concerned in the removal of secretions is modified or injured by a canula in the larynx or trachea, he describes the mechanism of coughing, which is simply getting as much air into the lungs as possible, condensing it, and allowing it to escape suddenly, on the same principle as the air-gun. To accomplish this, the glottis is firmly closed, coincidently with spasmodic contraction of the expiratory muscles, until the imprisoned air is sufficiently compressed, not only to give it power to project any offending substance before it like the ball from an air-gun, but also to increase the friction between it and the lining membrane of the air-passages to such a degree as to scrape off, so to speak, secretions that may be adherent. Considerable condensation, with great velocity of the expired air, are therefore necessary to give the maximum expulsive power. The latter without the former would accomplish nothing, because the same volume of air can be driven through the open or half open glottis just as rapidly as in the act of coughing, without the least power to remove a particle of mucus even from the larvnx, much less from the bronchial tubes. This can be demonstrated by trying to cough while retaining the vocal cords in the expiratory position—the lack of power resulting solely from inability to compress the air to any appreciable extent. Coughing through a canula is identical with this act when performed with a partially open glottis, and the only means left of subjecting the air to any condensation whatever is the much shorter time occupied in expelling it through the same space by which it more slowly entered. An excellent and forcible illustration of this argument, and one the mechanism of which is identical with that of coughing, is the familiar act of blowing the nose. There is little or no ability to remove secretions from this organ without first reducing the nostrils to a small fraction of their normal calibre, or by momentarily producing complete occlusion, as in closing the glottis, until the air is sufficiently condensed to force the secretions out with it. Very little power can be developed even by closing one nostril and forcing all the air through the other, if normally patulous. If secretions can be removed more effectually from the air-passages through a canula of the dimensions advocated by the authorities already quoted, for the same reason it should be easier to remove accumulations from the nose without compressing the nostrils.

Therefore, while the artificial opening must be largeenough for the perfect performance of the respiratory function, the power to expectorate is still further diminished, and in exact proportion to its increase beyond this limit.

Urethral Stricture.

Dr. E. R. Palmer, Louisville, Ky., sends a paper on this subject to the American Practitioner and News, July, 1888. It is one of the most frequent and serious of chronic diseases. Strictures of large calibre are common agencies in maintaining gleet. The penile urethra is the seat of a great majority of strictures, and the commonest site is within two and a half inches of the meatus. The cure of gleet calls for cure of the stricture, and the cure of stricture is best accomplished by internal dilating urethrotomy. The utmost cleanliness on the part of the patient and surgeon is of the greatest importance. For 24 hours before the operation the urine should be sterilized by boric acid—15 grains every three hours. The urethra and bladder should be washed out with a hot 1: 20,000 bichloride injection. The result of sepsis is suppression, which is only too often followed by death. The best treatment for sepsis is an injection of hot 110° antiseptic solution; no internal medication can compare to this. The Otis dilating urethrotome is the best instrument. All strictures do not call for active interference-There are acute congestive strictures, and those of large calibre, which are discovered accidentally. As a rule, a stricture which has been properly cut does not return. In using the gradual dilating method, it is an excellent rule not toforce too tight fitting sounds.

New Remedies—Antipyrin, Antifebrin, Cocaine, etc.

Dr. Walter P. Ellis, Masonville, Ky., gives (Am. Pract. & News, July, 1888) a summary of the most useful drugs which he has personally experimented with within the last few years. The general direction has been in the line of antiseptics. Of this class antipyrin and antifebrin stand at the top. It is not alone as a reducer of fever which makes them so important, but it is to other diseases, especially nervous, in which their triumphs are so great. In neuralgia or migraine, antipyrin, grs. x to xx, or antifebrin, grs. iij to x, will often bring relief in twenty minutes. Another use to which these drugs have been put is the cure of chorea. They have

been shown to possess hypnotic power, and are prescribed with benefit in delirium tremens. Dr. Dodge has used them in asthma. Dr. Thor in nocturnal emissions and sexual neurasthenia. They have a remarkable effect in whooping cough. In fact, the field of usefulness of these two drugs is widening every day. Among the local anæsthetics, several new drugs have been added, but none have as yet proved a formidable rival to cocaine. Among them may be mentioned drumine, erythroplacine, stenocarpine or gleditschine. Quebracho is one of the new remedies for which remarkable virtues are claimed in dyspnæa. It is claimed by Bordeaux that if quebraco be painted upon a fresh wound, ulcer, or burn, it promotes healing by first intention and granulations. In sparteine and strophanthus we have the latest additions to the list of cardiac stimulants. Pichi is a drug which has been recently brought before the profession as a remedy for vesical catarrh, calculus, the uric acid diathesis, and other affections of the urinary apparatus. Saccharin, which is three hundred times sweeter than sugar, has not practically come up to the theoretical standard in diabetes; it still has uses, however, and will prove of great practical value in pharmacy in disguising the nauseous and bitter taste of many medicines. [Stenocarpine or gledischine has been so publicly proven to be a perfect fraud that we are surprised to find mention of it by a respectable writer among respectable drugs. The base impostors who put it upon the market as an extract from the "honey locust" which possesses remarkable anæsthetic properties have been exposed and denounced so often that we fear to mention their names lest it might prove a desired advertisement.—Ed.

Wound of the Intestine.

Dr. W. O. Roberts, Louisville, Ky., reports the case (Am. Pract. and News, July, 1888) of a man, aged 37 years, a hard drinker, who received a gunshot wound 2½ inches above the umbilicus and one inch to the left of the median line. The exit wound was an inch below the last rib and to the left of the spine. As the symptoms pointed to a wound of the intestines, immediate laparotomy was determined upon. An incision from the point of entrance was made downward four inches. A small portion of the omentum and colon were pulled out. In the latter were found four openings, which were closed with silk, Lembert's method. He did very well for two days, but delirium coming on, he sank rapidly, and died the next morning.

Purulent Pleuritis.

Dr. W. B. Rogers, Memphis, Tenn., reports the following case in the Memphis Medical Monthly, July, 1888: A boy of 8 years, of delicate build, with a good family history as regards phthisis, was taken with a chill, and a diagnosis of pleuro-pneumonia was made. Temperature was high, expectoration scant, and condition desperate. A hypodermic syringe introduced proved the presence of pus. Four quarts of pus were withdrawn. Four days later the cavity filled again; the seventh rib in the line of the axilla was resected. all the fluid allowed to escape, the cavity washed out with a 1: 3000 bichloride of mercury solution, and a drainagetube inserted. The boy finally made a perfect recovery. Counter openings are not essential in all cases; thorough drainage, that broadest plank in antiseptic surgery, is essential, and should be sought at once in the direction of pus.

Painless Treatment of Rectal Diseases.

Dr. H. M. Brown, Hillsboro, Ohio, confines his paper (Memphis Medical Monthly, July, 1888) to hæmorrhoids, fissures, and ulcers. He injects a syringeful of an eight per cent solution of cocaine directly into the tumor, whereupon it swells up like a bladder, and is completely anæsthetized. A curved pair of scissors cuts it off close to the anus, and Monsel's solution stops all hæmorrhage, and no more is ever heard from it. Regular fissures of the rectum are treated with cocaine and dilation, then equal parts of carbolic acid and sweet oil are carefully brushed into the fissure, and the speculum withdrawn. It may be necessary to repeat the process. In treating ulcers, we must prevent constipation; use absolute cleanliness, thoroughly expose the ulcer cavity, and make application of some remedy which will insure rapid and healthy granulations.

Dysentery.

Dr. W. B. Winkler, Memphis, Tenn., says (Memphis Medical Monthly, June, 1888) that he has tried salines followed by opiates without curing his patients as fast as he could wish; that every form of astringents had been used by mouth and rectum without the desired end being reached. He believes malaria and torpidity of the liver are at the bottom of the trouble. He has had most prompt and gratifying effects from the use of mercury, especially bichloride, and podophyllin in small doses.

Cocaine Toxæmai.

Dr. Thomas P. Satterwhite, Louisville, Ky., says (Am. Pract. & News, July, 1888) the journals all over the country have shown that cocaine is not harmless when taken in any quantity. In the cases noted, toxic effects have been produced, from the fraction of a grain to 24 grains applied to eye, ear, nose, throat, larynx, teeth, gums, stomach, bowels, bladder, uterus, urethra, and under the skin. The symptoms were nausea, vomiting, headache, deafness, blindness, loss of taste and smell, profuse sweats, lividity, gastric cramps, frequent, feeble, irregular, intermittent, unaccountable pulse, hallucinations, mania, etc. Cocaine may be toxic; sometimes, in large doses, fatal. It may give rise to fatal symptoms in doses usually deemed safe. The danger is greatest when given under the skin.

Abortion-Some Causes and Treatment.

Dr. C. M. Poole, of Craven, N. C., read before the Rowan County Medical Society, a paper on this subject (Med. Times, July 2, 1888.) He says that abortion occurs much more frequently in some localities than in others. The first thing to be done is to look for the cause. Does malaria cause abortion? The writer is forced to rely almost exclusively upon his own experience. In the eastern part of his county (along the banks of the Yadkin river, and of creeks whose valleys are full of ponds), abortion occurs as a rule, once in every 120 pregnancies—four-fifths of one per cent. It is impossible to say what the percentage would be if all the lying-in cases were recorded. In the last 100 cases of confinement attended by Dr. Poole, over 16 per cent. were abortions or premature labors, to say nothing of the many cases of threatened abortion seen in time to arrest and bring to term. Since malarial fever is so very prevalent in this district in its season, and as abortion is almost exclusively found within the limits of this infected locality, it is reasonable to suppose that it is one of the causes of this large percentage of abortions.

Whether this percentage of abortions is due to malaria per se, or to the quinine prescribed, is a question. Malaria, under certain circumstances, undoubtedly shortens the period of gestation, but many cases of abortion are attributed to a malarial attack, when really the cause is the use of quinine or some other oxytocic remedy. Many physicians do not believe quinine is oxytocic; but in a number of cases its hazardous effect in this direction has been too clearly

demonstrated to disregard its effect upon the non-striated muscles of the uterus. He now combines a little morphia with quinine when necessary to give it to pregnant women, which seems to control the oxytocic action of the quinine. He has treated several cases of abortion that were caused by the woman picking cotton in her apron, which was tied around the waist and left to hang in the shape of a bag over the distended abdomen. The combined weight, friction and heat over the abdomen, together with the peculiar position of the woman, were perhaps the cause.

Another cause in these cases which comes in as a supposition: the constant inhalation of the odor of cotton seed and plant, especially after it has been nipped by frost. By thoroughly impregnating the system with these odors, the oxytocic effect may have been sufficient to produce abor-

tion.

Santonin is rarely prescribed for adults; but it should not be prescribed for pregnant women, for it acts upon the nonstriated muscles like ergot, and will cause abortion.

In the treatment of threatened abortion, viburnum prunifolium is the most reliable uterine sedative. Many cases have been saved by the free administration of this remedy, even when there was quite severe homorrhage from the uterus. Where abortion is inevitable, the sooner the end is reached the better. If hemorrhage is profuse, the uterus should be emptied immediately. We frequently see the feetus and membranes coming away intact; but in many cases the secundines are left in the uterus. In such cases, especially in early abortions, we may expect trouble if we attempt to remove them at once. Dr. Cheatham, of Henderson, N. C., claims that he has invented a scoop that will empty any uterus of any portion of retained placenta or membranes with impunity, no matter how early the abortion.

Hence the question, When should the secundine be removed? Churchill, Leichman, Meigs, Bedford, Tyler Smith, Ramsbotham, Hodge, Playfair, Simpson, Schroeder, Angus McDonald, Walter Coles and others, advise the expectant plan. But on the other hand, Barnes, Lusk, T. Johnson Alloway, Mundé and Farr favor immediate removal of the placenta and membranes.

Dilatation of the closed cervix with tents and extraction of the secundines with the finger or forceps is the usual method for immediate removal. Thomas warns us of the danger of dilating the cervix with tents, but says the dan-

ger is not so great as to make one hesitate in using them if necessary. Barnes, Playfair, Simpson and Lusk deprecate the curette or forceps as being hazardous. They employ the finger, and consider it safe and satisfactory. Alloway and Farr, on the other hand, regard the use of the finger as highly dangerous, and claim that the curette gives better results.

The foregoing shows that active interference in abortion is, as a rule, unnecessary and dangerous; yet it will not be safe to pin our faith too closely to either of these methods. Where there are alarming symptoms, remove the secundines at once, and do not be particular as to how this is done. it can be done with the finger, use it; if not, resort to the forceps or curette. Where there is no cause for haste, the expectant plan has been very satisfactory. Dr. Poole has left cases ten, twelve and even twenty-four hours before removing the secundines, and has never seen a bad symptom The os is almost invariably found dilated, and in the majority of cases the placenta is presenting at the external os or lying in the vagina. After the secundines are removed, the very strictest Listerism should be observed. In addition to the proper antisepsis, the most scrupulous cleanliness should be observed in every way. Bichloride of mercury, 1 to 2,000 is the best antiseptic for intra-uterine irrigation where such treatment is necessary. But it should be used with caution; for, though generally safe, it is not entirely free from danger. Not only in using bichloride of mercury, but in making any kind of injections into the uterus we should be very cautious. Thorough disinfection of the hands and instruments is of importance. Observe the strictest cleanliness and antiseptic measures, and enjoin the same upon patients and nurses.

Electrolysis for Hypertrophy of the Prostate.

Dr. Albert Moll, the Berlin Correspondent of the Medical and Surgical Reporter, July 14th, 1888, writes: "Dr. Leopold Casper, one of our eleverest doctors for the surgical diseases of the urinary organs, has communicated to the Medical Society of Berlin a new treatment for hypertrophy of the prostate. After having given a short historical sketch of the different treatments of this disease, and having called attention especially to the method of Dr. Newman of New York, Dr. Casper described his own new method of treating the same. It consists in the application of electrolysis. The first trials were made upon animals, in order to prove

clearly whether this method was dangerous or not. After having seen that it was not dangerous, Dr. Casper began to try the treatment upon men, in the following manner: The patient is turned over on the side, the rectum is filled with three fluid ounces of a solution of a mercuric chloride (1-1000). The indifferent pole is the positive, a large plate of 400 grm. It is applied to the abdomen. The electrolysis-needle must be pricked into the prostate from the rectum, and that part of the needle which remains beyond the anus must be fixed on to the negative pole of a galvanic battery. By degrees twelve cells are added, and the current has to be closed five minutes. After this time the needle must be slightly withdrawn, to enable one to turn it in the same hole, but placing the end of the needle in another direction. This is to be repeated for the third time, and each time the current has to be closed for five minutes. The strength of the current is from 10 to 25 milliamperes. These sittings are to be made, according to the state of the individual, up to as many as twenty times. Dr. Leopold Casper has treated four patients in this manner. times it has proved successful. Of these three cases two have been greatly benefited. At all events Dr. Casper has shown that the operation, carefully executed, is perfectly harmless. In the discussion a recognition was given to the praiseworthy idea of Dr. Casper for this new treatment of the hypertrophy of the prostate."

[It is proper that we should add in this connection that Dr. Hunter McGuire, of Richmond, Va., has been using the electrolytic method of treating chronic enlargements of the prostate gland for about two years, and has been so much pleased with the gratifying results that he has promised a paper on the subject of treatment of enlarged prostate at an

early future day.—Ed.]

Arrest of Hæmorrhage from Wounds of the Palm of the Hand.

Dr. R. J. Lewis, of Philadelphia, says (Med. and Surg. Reporter, July 14,) hamorrhage from wounds of the palmar arches is usually controllable by maintaining extreme elevation of the hand. This is most thoroughly effected, and with the least discomfort to the patient, by vertical suspension of the limb, the attachment being made along the palmar and dorsal surfaces of the forearm by adhesive strips, after the ordinary manner of making extension in the treatment of fractures. A cord from the adhesive straps may be fastened to the top of a bedpost or other convenient elevated

point. If posture alone should not arrest the hæmorrhage, the most effective compression can be made by placing in the palm of the hand an india-rubber ball, or a ball solidly made of cotton wadding, and on this the fingers and thumb should be closed and bound tightly with a roller bandage. Using these expedients he has never been obliged to ligate arterial trunks for the arrest of hæmorrhage from the palm of the hand.

Chian TurpentineTreatment of Cancer.

Dr. Daniel Lewis, Surgeon to the New York Skin and Cancer Hospital, says (N. Y. Med. Jour, July 21,) that Chian turpentine, the internal administration of which as a remedy for cancer has been recently recommended anew by Prof. John Clay, Birmingham, England, is a product of the Pistacia terebinthus, a tree which in its native island of Scio, in the Mediterranean, grows to the height of thirty or forty feet. The gum is obtained from incisions into the bark, and the many impurities which it contains are composed of sand, leaves, straw, and particles of the bark and fruit. Prof. Clay insists that its efficiency depends upon the genuineness of the drug. Flückiger and Hanbury's "Pharmacographia" describes "Chian turpentine, as found in commerce and believed to be genuine as a soft solid, becoming brittle by exposure to the air; viewed in mass, it appears opaque and of a dull brown hue. If pressed while warm between two slips of glass, it is seen to be transparent, of a vellowish brown, and much contaminated by various impurities in a state of fine division. It has an agreeable, mild terebinthinous odor, and very little taste. The whitish powder with which old Chian turpentine becomes covered shows no trace of crystalline structures when examined under the microscope." Strassburg and Venice turpentine and Canada balsam are often substituted for it, which can usually be easily detected by applying the tests as to taste, odor, and appearance given above.

The turpentine used by Clay in his first cases (Lancet, March 27, 1880), was in form of pills containing three grains, with two grains of flowers of sulphur. Two pills were given every four hours for many weeks, and in some cases for nearly a year. In some instances the pill form was not well digested, and his latest recommendation is to administer it in an emulsion as follows: One ounce of Chian turpentine is dissolved in two ounces of pure sulphuric ether. This solution has been termed "turpentine essence." The emulsion

is made by adding one ounce of this essence to a mucilage of powdered gum arabic 5 iss and water 5 viiss making a tenounce mixture, a teaspoonful contains about three grains of the drug. A dessertspoonful contains the same amount of turpentine as the two pills previously recommended. In some cases resorcin is added in grain doses. This emulsion

is not of a disagreeable taste.

Tonics have been used when indicated. In some instances local applications have been made; in others this internal remedy alone has been employed. When it has been taken for about three months it should be omitted three days in every fortnight. The sulphur is often given in a separate pill, especially in cancer of the uterus and rectum. Prof. Clay has seen a number of complete cures, not only of uterine cancer in advanced stages, but also of cancer of the rectum and surface epitheliomata. In cancer of the breast he reports marked improvement of symptoms and complete arrest of the new growth.

The drift of pathological research is now strong in the direction of a specific origin of the disease. No report has been published, stating the precise changes in the tumor, but the primary action is upon the periphery of the growth. The plan has been tested in the London Cancer Hospital, and, after a tolerably thorough trial, condemned by Dr. Marsden and Mr. Purcell. Another trial has recently been made, however, and one of the surgeons of the same hospital declares the Chian turpentine to be a very useful remedy

in many cases.

In the *Lancet*, November 22, 1887, the editor says there can be no doubt that Clay's reports of cures are trustworthy, and that it can hardly be possible, with a man of his large experience, that they were *all* cases of mistaken diagnosis.

He advises a continued trial of the remedy.

Several patients at the New York Skin and Cancer Hospital have been under the treatment from one to six and eight months. All take the remedy well, by giving them a brief rest occasionally. A cancer of the uterus has been greatly benefited; pain has decreased, hæmorrhage has ceased, and granulations have become healthy. A large epithelioma of the face has decidedly changed in character. In some cases no effect whatever has yet been noted.

Unpleasant Effects of Cocaine.

Dr. R. O. Cotter, Macon, Ga., contributes to the Medical and Surgical Journal, July, 1888, the following: For the past

two years the writer has ceased to prescribe cocaine in ointments for temporary relief of congestion of the nasal mucous membrane, for the violent reaction following its use only increased the trouble. His experience is that it is harmful in conjunctivitis, because it corrugates, dries, and irritates the conjunctiva and cornea. Its action is probably explained by the sudden exsanguination of the circum-corneal tissue. He finds that a ten per cent. solution in renal surgery answers better than twenty per cent. Cocaine is invaluable in eye and nose surgery, but more care must be exercised than is done. Five grains would be liable to prove quite dangerous in a case of weak heart or organic heart trouble.

Fœtal Medication.

Dr. T. M. Kyle, of Aurora, Ind., advocates (*Progress*, July, 1888) medication of the mother to remedy any of the constitutional diseases that may be found in the fœtus—syphilis, for example.

Book Notices.

Surgical Diseases of the Genito-Urinary Organs, including Syphilis. By E. L. KEYES, M. D., Professor of Genito-Urinary Surgery, Syphilology and Dermatology in Bellevue Hospital Medical College, etc. A Revision of Van Buren and Keyes' Text-Book upon the Same Snbjects. New York; D. Appleton & Co. 1883. Cloth, 8vo. Pp. xv-704. Price \$5. (For sale by Messrs. West, Johnston & Co., Richmond.)

We are glad to receive this book. There was need for such a revision of the former work of Van Buren and Keyes, which soon established itself, after publication in 1874, as the authoritative text-book on venereal diseases and their complications and sequelæ. The present edition is a thorough recasting of the entire original edition—almost every section having been re-written and brought fully up to the present standard of information on the subjects treated. The present edition is practically a complete work on the surgical diseases and injuries of the genito-urinary organs of the male, and is by no means so limited to the simply venereal diseases as the former editions. In fact, the first 459 pages, or Part I, is taken up with diseases and injuries of the genito-urinary organs, including a sufficiently full chapter of 45 pages on gonorrhæa, etc., while Part II

entire (pages 460–688 inclusive) is given up to a thorough consideration of chancroid and syphilis in all of its phases. We do not know of any one work in the English language, devoted to diseases, etc., of the genito-urinary organs, including the venereal diseases, that is so well adapted to the wants of the general practitioner. To the specialist this book is invaluable.

Treatise on Dislocations. By LEWIS A. STIMSON, B. A., M. D., Professor of Clinical Surgery, University City of New York, etc. With 163 Illustrations. Philadelphia: Lea Brothers & Co. 1888. 8vo. Pp. 543. Price, cloth, \$3.; leather, \$4.

Some four years ago, the same author issued a volume on Fractures, which at once assumed a standard rank. The present issue on Dislocations is intended as a companion book, and is known as Vol. II of the Treatise on Fractures and Dislocations. The two volumes contain about the same number of pages, and the complete work (two volumes) is

sold, in cloth, at \$5.50, or in leather at \$7.50.

We know of no work that equals this in the correct record of the literature on the subject of dislocations. While in general the greatest care has been taken to describe the special dislocations and their effects, and to give proper credits for the information received, we are a little afraid that in some instances sufficient details are not given as to the methods of reduction. Sometimes also (as the paragraph beginning, "The history," etc., on page 335) the sentences could be reconstructed so as to read more smoothly. But notwithstanding such slight criticisms, as they appear to u,s the work well demands a place on the shelf intended for frequent study or reference in the library of every one who undertakes general or special surgery.

System of Obstetrics. By American Authors. Edited by BAR-TON COOKE HIRST, M. D., Associate Professor of Obstetrics in University of Pennsylvania, etc. Vol. I. Illustrated with one colored plate and 309 engravings on wood. Philadelphia: Lea Brothers & Co. 1888. Large 8vo-Pp. 808. (From Publishers.)

The Preface tells us that this Vol. I is just one half of the "System." Vol. II will be issued in a few months at latest, thus completing a perfect work on obstetrics by American authors. Volume I is made up by eight distinct chapters or sections. Dr. Engelmann is the author of "The History of Obstetrics," which is an interesting and instructive chap-

ter, but nothing like as full as we had hoped he would make it. We are surprised that no credit is given to Dr. Long, of Athens, Ga., as a discoverer of ether as a surgical anæsthetic—a claim which was so well sustained by the lamented Marion Sims. Dr. H. Newell Martin, of Baltimore, gives an excellent chapter on "The Physiology and Histology of Ovulation, Menstruation and Fertilization: the Development of the Embryo." The Editor writes the third chapter, on "The Fœtus: its Development, Anomalies, Monstrosities, Diseases, and Premature Expulsion." Dr. Wm. Wright Jaggard, of Chicago, has a first rate chapter on "Pregnancy: its Physiology, Pathology, Signs, and Differential Diagnosis." Dr. Samuel C. Busey, of Washington, D. C., contributes a very good practical chapter on "The Conduct of Labor, and the Management of the Puerperal State." Dr. R. A. F. Penrose, of Philadelphia, writes a good descriptive paper on "The Mechanism of Labor, and the Treatment of Labor Based on the Mechanism." Dr. J. C. Reeve, of Cincinnati, gives a good historical article and a most excellent review of "The Use of Anæsthetics in Labor." "Anomalies of the Forces in Labor," by Dr. Theophilus Parvin, of Philadelphia, is the title of the concluding article, in which deformities, monstrosities, etc, are also considered. A good index is added to the volumes.

In the mechanical issue of the work the publishers have exercised good judgment in selecting heavy paper, large

book type, well leaded, and durable binding.

Pathology, Diagnosis and Treatment of the Diseases of Women. By GRAILY HEWITT, M. D., Lond., F. R. C. P., etc. A New American, from the Fourth Revised and Enlarged London Edition, with 236 Illustrations. Edited with Notes and Additions, by H. MARION SIMS, M. D., New York. In Three Octavo Volumes. Pp. 1040. Price of each Volume \$2.75, or \$8.25 for the set. New York: E. B. Treat. 1887

With only three or four exceptions as to pages, this is a verbatim reprint of the edition of the same work issued by Bermingham & Co. in 1883, in two volumes at \$2.25 each, or \$4.50 for the set. The edition now under notice has four pages of new matter—two to describe Dr. Harry Sims' retroversion pessary and two to illustrate a tube for abdominal drainage in laparotomy which he has been using. As to the merits of Dr. Graily Hewitt's work, there is no other opinion than that it is an excellent standard authority, and his work is made more valuable by the frequent annotations by Dr. Sims. Indeed, we regard the 75 or 80 pages, inserted

as an "Appendix," on the diagnoses of pains, tumors, etc., as the best chapter on the subject in the English language. For the every-day family practitioner, Hewitt's work is undoubtedly one of the most important works which should be in his library. Mr. Treat has issued this edition of three volumes in fine library style, and constitute volumes 7, 8 and 9 of the series of "Medical Classics" which he has undertaken to publish.

Reference Handbook of the Medical Sciences. By Various Writers. Illustrated by Chromo-lithographs and Fine Wood Engravings. Edited by ALBERT H. BUCK, M. D., New York City. Vol. VI. New York: Wm. Wood & Co. 1888. Royal 8vo., pp. 778. (From Publishers.)

The value of this work is conceded on all hands. scope embraces the entire range of scientific and practical medicine and allied science. The present volume embraces all subjects that can be alphabetically arranged between the words "Prairie Itch" and "Teplitz-Shonau" inclusive. Ninety-four able authors compose the corps of contributors, and are geographically distributed as follows: Canada 7, New York 31, Massachusetts 12, Illinois 9, Pennsylvania 6, Missouri 6, Maryland 6, Ohio 4, District of Columbia 4, Georgia 2, North Carolina 1, South Carolina 1, Louisiana 1, Connecticut 1, Michigan 1, Wisconsin 1, California 1. work is cyclopædic in character—indeed some of the articles are as lengthy as most of the chapters on the same subjects in the systematic text-books and treatises. For instance, the section on "Secretion" covers over 15 of the very large size, double column, small type, non-leaded pages, which is about the equivalent of 50 pages of the ordinary size textbooks. In like manner, the subjects of "Sewage" and "Sewerage" take up about 30 of these large pages; "Spinal Cord" and "Nerves" occupy over 60 pages; and thus we might mention other instances. If any of these articles needed editorial curtailment, that work has been admirably done, as we have not noticed many superfluous sentences. "Reference Handbook" will be authoritative in the main points for at least twenty or twenty-five years; hence it would well repay every practitioner who can do so to secure this magnificent standard library series, which will be completed on issue of the seventh volume, to be issued in a few The text of this "Handbook" is made the more explicit by the introduction of wood cuts and chromo-lithographs wherever such seems to be necessary. In short, it is an invaluable work for every doctor's library.

Editorial.

Our September Number

Will not contain as many pages as other numbers. Our purpose is to catch up so as to issue the journal hereafter about the first of each month. We have got behind time because we have waited month after month in order that we make analyses of every original article that appeared in the Southern journals bearing date of the month previous to our issue. But as some of these journals have reached us as late as the 10th and even 15th of the month after the nominal date of their issue we have fallen back until we can stand it no longer. Hereafter, we will simply make analyses or selections from the Southern journals as they arrive so as not to delay our issues materially after the first of each month. Our October No. will be of extra size so as to make up in number of pages what may be left out of the September No.

Chloroform Mortality—A Refutation.

"To the Editor of the Medical Press and Circular:

SIR,—In your issue of the 4th inst. [July,] a paragraph appears which questions the accuracy of a statement made by one of the most brilliant of surgeons and accomplished of gentlemen, Mr. Hunter McGuire, of Richmond, Vir-

ginia.

Mr. McGuire had 28,000 operations under chloroform anæsthesia without a death, and this appears incredible to the paragraphist, who is probably unfamiliar with the fact that on the few surgeons in the Confederate service an enormous demand was made during the four years of the American Civil War. Mr. McGuire is not alone in a large record. Mr. Julian J. Chisolm, of Baltimore, Maryland, reports more than 10,000 cases of operations under chloroform without a death.

Both these gentlemen were in the service of the Confederacy. Mr. McGuire was one of the principal surgeons to the Army of Northern Virginia, first under Joe Johnson and afterwards under Lee, and was, I believe, attached to the 2nd Army Corps, Stonewall Jackson's. A few facts will show how very probable to such a man an experience of 28,000 cases would do.

Federal enlistments, according to official returns recently issued, were 2,778,304, and the Confederate forces may be estimated at 1,800,000, making a total of 4,578,304. Deduct-

ing deserters and re-enlistments, the actual number of com-

batants did not fall short of 4,000,000.

The greater number of the battles fought by the Army of Northern Virginia were fought in the vicinity of Richmond, to which their wounded were sent. The Confederates were anxious to conceal their losses in killed and wounded from the knowledge of their enemy; therefore we can only guess at the number of wounded in their service. but they must have been enormous. Manassas, first and second, Five Forks, Gaines' Mill, Malvern Hill, Chancellorsville, Fredericksburg, The Wilderness, and Spottsvlvania. and the heavy fighting at Petersburg, were all in the vicinity of Richmond. In the Wilderness campaign Grant acknowledges to a loss of killed, wounded, and missing of 77,452, and General Long places Lee's loss at something under 30,000, making a total of 107,000 in six weeks, fighting in the scrubby, marshy plains that stretch from the Rapidan to the James' River. In one assault on Petersburg Grant had 5,000 killed. Colonel William F. Fox estimates the number killed as 5 per cent. of the total strength of both armies, and the wounded may fairly be estimated at 25 per cent. These estimates will not appear too high when the following lists, compiled by Colonel Fox, are read:—

The 1st Minnesota Regiment, in defending a position at Gettysburg, lost 205 killed or wounded out of a total of 252. The 141st Pennsylvania lost 76 per cent. of their number at Gettysburg, The 25th Massachusetts, at Gaines' Mill, lost 71 per cent. The heaviest losses throughout the war, however, were on the Confederate side. In one company of the 26th North Carolina, 84 strong, every man and officer was hit, at Gettysburg; "and the orderly sergeant who made out the list did it with a bullet through each leg." At Fair Oaks one company of the 6th Alabama had 21 killed, 23 wounded, out of a total of 55 who were in action. The 1st Texas, at Antietam, lost 82 per cent.; 21st Georgia, at Manassas, lost 76 per cent.; 8th Tennessee, at Stones River, lost 69 per cent.

"The extent of these losses will be better understood if compared with some of the extraordinary cases cited in the histories of other wars. Take for instance the charge of the Light Brigade at Balaklava—the charge of the Six Hundred. Lord Cardigan took 673 officers and men into that action; they lost 113 killed and 134 wounded; total, 274, or 36.7 per cent. The heaviest loss in the late Franco-Prussian war occurred at Mars-la-Tour, in the 16th German Infantry.

which lost 47 per cent."

From such accidents as the careless use of firearms, boating accidents, and boiler explosions, the Federal authorities account for 8,400 deaths, and from such accidents the Confederates were no more exempt than their opponents.

In America there would have been no occasion to write one word in support of the credibility of Mr. McGuire's statements, and I regret that anything should appear that even looked like casting a doubt on the veracity of one who by uniform kindness, unceasing care, and a skill that reflects honour on Surgery, has endeared himself to the peoples of the States, and who has many evidences of respect and esteem from wearers both of the "Grey" and "Blue" uniform. Had the paragraphist been familiar with the circumstances, I feel confident that he would never have penned the objectionable statement. I am, &c.,

George Fox.

80 Lower Gardiner Street, Dublin.

The foregoing letter which we publish in full from the Medical Press, of July 18th, of London, refers to a paper read by Dr. McGuire before the Medical Society of Virginia in October, 1887, and published in the November number of this Journal. The title of this paper was "The Choice of General Anæsthetics in Surgery and Obstetrics." The paper was an able one, and contained many original and striking ideas, and attracted unusual attention in this country; many extracts from it were published in European Journals.

Dr. McGuire does not say in his article that he has "had 28,000 operations under chloroform administrations without a death." We quote this paragraph from the pages of our

journal.

"Nussbaum has seen in military life 40,000 administrations of chloroform without an accident, and in the Confederate Army Corps to which I was attached as Medical Director, chloroform was given 28,000 times without deaths ascribed to its use." He does not intend to say that he individually gave the anæsthetic 28,000 times, but that he and the large corps of surgeons under his control gave it. This explanation will not be needed by residents in this country, or those familiar with the organization of the Confederate and Federal Armies.

Notwithstanding the error into which the paragraphist and Mr. Fox have unintentionally fallen, we, on the part of the old Confederate surgeons, and the profession in the South generally appreciate Mr. Fox's kind and noble motives, and heartily thank him for it. It was a brave and generous defense of a distinguished professional brother, separated from him by the Atlantic ocean, and of one whom we all love and delight to honor.

In connection with this letter, we cannot refrain from expressing our gratification, that the British public and profession are at last comprehending that great disparity of forces on the Federal and Confederate sides, during our late

civil war between the States.

Although the figures at our command show a greater difference than those used by Mr. Fox, it will be seen that the Federals had in the field 1,000.000 more men than the Confederates, in the Wilderness Campaigns to which reference is made. Grant acknowledges to a loss in killed, wounded and missing of more men than Gen. Lee had in the whole Army.

English Title of Surgeon.

No surgeon in Great Brittian is called "Doctor." He is simply "Mr.," and it appears odd to our ears to hear Mr. Fox, the eminent surgeon, speak of Dr. Hunter McGuire as Mr. McGuire, of Richmond, Va., and Dr. Chisolm as Mr. Julian J. Chisolm, of Baltimore, Md.

Pharmaceutical and Chemical Products and Surgical Instruments and Appliance Department of the Virginia Exposition.

The Exposition to be held in this city during the months of October and November next, offers to manufacturers and dealers in surgical, pharmaceutical and chemical appliances an unusual opportunity of presenting to the public all products coming under the above heads and also all such as bear in any way in their particular fields. The mineral water resources of this and other States should be made a special feature of the Exposition. Crude as well as prepared chemical products should be exhibited, and electrotherapeutical appliances should receive due attention. The outlook for a grand exhibition is very gratifying and promises to eclipse anything of the sort ever undertaken in the South. Applications for exhibiting space have been so numerous that an extension of the mammoth buildings has become a necessity.

To facilitate the work in the department above referred to, the following committee has been appointed: T. Roberts Baker (Chairman), Drs. Hunter McGuire, C.W. P. Brock, Hugh M. Taylor and Mr. John Pierce, of Harrison & Pierce, Pharmacists. Any of these gentlemen will cheerfully render any aid in their power, but applications for space to exhibit, rules governing, etc., should be made to Dr. Henry C. Jones, Gov. General of the Exposition.

The Editor of this journal will be glad to promote the interests of advertisers especially in the matter of exhibitors

and those specially interested in such exhibitions.

University of Virginia-Medical Department.

In the adoption of a resolution by Gratiot County (Mich.) Medical Society, deprecating the removal of the Medical Department of the University of Michigan from Ann Arbor to Detroit, a unanimous sentiment was expressed. Among the remarks made, Dr. Kennedy "emphasized the fact that clinics do not constitute the chief part of a medical education, but well grounded fundamentals." He compared the University of Michigan to the University of Virginia—both away from large cities and large clinics; and yet the graduates of the University of Virginia are looked upon by the Examining Boards of the Army and Navy as the best educated produced by any of the Schools." We appreciate this statement of fact (in Physician and Surgeon, of Mich., July, 1888,) the more, coming as it does from a witness whose testimony cannot be based on personal friendships or localities, but on unprejudiced observation.

Antipyrin and Sweet Spirits of Nitre Dangerous.

A paragraph is taking the rounds of the journals which we should repeat, as it may forewarn our subscribers, and save the lives of some of their patients. Antipyrin and sweets spirits of nitre are both in common use now as febrifuges, and the inclination to combine them in the same prescription might be tempting. But when antipyrine is dissolved in sweet spirits of nitre, the resulting solution assumes a rich green color. A new substance is formed which possesses highly poisonous qualities. In one instance, at least, death seems justly to be attributable to the use of the combination.

American Public Health Association.

The sixteenth annual session will be held in Milwaukee, Wis., November 20,-23 inclusive. For special information, address Dr. Irving A. Watson, Secretary, etc., Concord, New Hampshire.

Medical Society of Virginia.

The nineteenth annual session of this Society will convene in the city of Norfolk, Va., at 8 P. M., Tuesday, October 23rd, 1888. The Norfolk profession is wide awake to the importance of this session, and is leaving no opportunity unimproved to make it profitable and pleasurable to those who may attend. Dr. Alex. Tunstall, Norfolk, Va., has been chosen Chairman of the Local Committee of Arrangements, and we are sure with such a man at the head—one who has the cordial support of the entire local profession nothing will be left undone that can be done by the Committee to make this a most successful session. dent of the Society Dr. Benj. Blackford, of Lynchburg, Va., is likewise energetic and has already sent in a goodly list of applications for Fellowship. A number of good papers, we hear, are in preparation by some of the Fellows, and we hope to hear that a number of distinguished visitors from other States will be in attendance. The preliminary postal announcement of the session will be issued this month to the Fellows, and we hope each Fellow will promptly make acknowledgment to the Secretary of receipt of the postal, etc.

The Viburnum Compound (Hayden)

Special advertisement contains a list of names of eminent Virginia doctors who use this agent with great satisfaction as a uterine tonic and antispasmodic. The fact that these doctors useit gives confidence to the statement that the preparation possesses undoubted virtues in the class of diseases for which it is recommended. We notice that the leading medical journals of other States have the same advertisement substituting simply the names of like eminent men of their respective States who are in the habit of using it.

The New York Polyclinic

Will open a Hospital in connection with the College building sometime next October. This will be a great benefit to the matriculates of this excellent post-graduate college.

Hospital of the College of Physicians and Surgeons, Baltimore.

The building has been begun. It will be five stories high, fitted throughout in the most approved manner for its intended purpose, and have accommodations for three hundred patients.

Subscribers-Not All, but Some-Will Please Read.

An Exchange relates that a revivalist requested all in his congregation who paid their debts to rise. The rising was general. After these had taken their seats, a call was made for those who did not pay their debts likewise to rise. One solitary individual arose, and explained that he was an editor, and could not pay his debts because nearly all the rest of the congregation were owing him the amounts of their subscription to his paper. Will not some of our readers take the hint?

Liquid Iron-Rio.

We have received from the Rio Chemical Co., of St. Louis, an express package of their preparation of "Liquid Iron-Rio" which looks nice, tastes pleasant and is said to be easily assimilated. It does not cause headache nor constipation, and does not stain the teeth. It is claimed that each dose of a fluid drachm contains one grain of iron, but in what chemical form is not stated. Pound bottle, \$1.; per dozen, \$8.

Dr. A. Y. P. Garnett and the Confederacy.

In many of the notices of the death of this eminent physician, we find that many of our exchanges state that he was Surgeon-General of the Confederacy, How the error began we cannot trace. Dr. Garnett never rose to a higher rank in the Confederate Army service than Surgeon. The only Surgeon-General the Confederacy ever had during the four years of its existence was Dr. S. P. Moore, who has resided in Richmond, Va., ever since the war. Dr. Moore retired from practice about ten years ago, although he is in good health and looks well.

Capon Springs and Baths,

In Hampshire county, W. Va., is one of the most delightful places we know of to spend the heated season of August and early September. Besides the charms of the scenery, the enticements from despondency by the happy gaiety of the guests, the unexcelled arrangements for the enjoyment of the visitors—out-doors and in-doors—the waters of these Springs possess a curative value in nephritic, rheumatoid, cutaneous, and other diseases that is not surpassed by those of Vichy or Carlsbad. Col. W. H. Sale is a prince among Springs Proprietors. Read the advertisement which is continued in this issue.

The Sanitarium for Nervous Diseases

Which is being built in Washington, D. C., by Dr. William A. Hammond, now of New York, we look upon as one of the news items of the day of great importance to the profession. Dr. Hammond's special eminence as the American authority in all matters pertaining to nervous diseases assures a successful undertaking. We look upon his selection of Washington city as the location of his magnificent Sanitarium, supplied with all approved modern improvements, as an excellent one, and the part of the city in which the building is being erected is perfectly healthy. The equipments for treatment, the ability of the nurses, etc., will be all that can be expected. It is not intended to be an asylum for incurable cases, but a sanitarium in which to treat all forms of curable diseases of the mind and nervous system. Note the special page advertisement on card board. page 34 after reading matter. That announcement is of interest to the profession of the country.

Dr. J S. Stone

Of Lincoln, Va., has returned home well and hearty after a visit to European medical centres. He was absent five months. His interesting letters which have appeared in this journal will be followed by a supplemental one in our September number. He has returned to active practice, and finds his hands full already.

Jefferson Medical College of Philadelphia

Announces that, beginning with session of October, 1890—two years hence—it will establish the three-years graded course of instruction.

The American Pharmaceutical Association

Is to hold its 36th annual meeting in Detroit, Mich., during the week beginning at 3 P. M., Monday, September 3d, 1888.

California Medical Examining Board Law.

By a recent ruling of the California Medical Examining Board, all who propose to begin the practice of medicine or surgery in that State after March, 1891, will have to be graduates of a three-year graded college. This may be a good move, but the Virginia law is better, which allows any one to practice who proves himself, by an examination on the eight usually taught branches of medicine, to be satisfactorily proficient. Quackery and ignorance in the Virginia profession that was creeping into it up to four years ago is fast being got rid of. Virginia has the most perfect law on the subject of any of the States.

The National Association of Railway Surgeons

Was organized in Fort Wavne, Ind, May 15th, 1888, and held its first or preliminary session as an organization in Chicago, Ill., June 28th. Dr. C. B. Steman, of Fort Wayne, occupied the chair. The objects of the Association are to bring together annually the surgeons of the different railroads throughout the country to develop this special and rapidly growing branch of surgery; to report cases coming under observation; to discuss the best methods in the treatment of railway accidents, etc. Sixty-three railroads were represented. The Association starts off with a membership of over 600. Drs. J. B. Luckie, of Birmingham, Ala., N. C. Lynd, of New York city, A. J. Banker, of Columbus, Ind., H. H. Middlecamp, of Warrenton, Mo., LaGrange Leverance, of Huntington, Ind., J. R. Williams, of White Pigeon, Mich., Wm. C. Caldwell, of Fremont, O., W. L. Buckner, of Youngstown, O., J. A. Jackson, of Madison, Wis., W. C. Henry, of Aurora, W. B. Outen and W. A. McCandless, of St. Louis, Mo., and others, read entertaining papers. In short, the meeting was a great success, and assures future usefulness. The next meeting (1889) will be held in St. Louis, Mo. Dr. J. W. Jackson, of Kansas City, Mo., is President-elect, and Dr. C. B. Steman, of Fort Wayne, Ind., Secretary. We hope all our friends in railroad service will promptly join and take active part in the future proceedings.

The German Physicians of the Late Emperor Frederick

Have published a statement concerning their participation in his case, an abstract of which has been cabled to the Associated Press, and appeared in the daily papers. They state that in May, 1887, they pronounced the disease to be cancerous, and recommended that the larynx be opened, and the growth on the left vocal cord be excised—"a small operation which promised the best results." Of seven such operations which Von Bergmann had performed, all were successful. Sir Morell Mackenzie was then called in, and opposed the operation, and, the report states, gave his assurance that after a few weeks of treatment, the patient would recover his voice, and be able to command the autumn

manœuvres. Dr. Gerhardt accuses Mackenzie of having removed, for microscopical examination by Virchow, pieces

of tissue from the unaffected part of the throat.

Dr. Schroetter states that when he first examined the patient's throat, in November, 1887, he decided that he was suffering from a cancer so far developed as to make it necessary to extirpate the larynx. Mackenzie, he says, then admitted that the growth looked like a cancer, but the Emperor Frederick refused the plan of extirpation, because of the risks attending it. The German physicians thereupon signed a declaration placing the responsibility of the case upon Sir Morell Mackenzie.

Sir Morell Mackenzie is reported to have unqualifiedly denied the correctness of the above statement by the German physicians, and that in the course of a few days he might be able to publish a statement of the details as to the character of the conduct of the case, from which, at present, he is precluded by State reasons.—Med. News, July 14.

Special Permits Granted by the Medical Examining Board of Virginia.

A rumor is well circulated that notwithstanding the hard fight by the profession of Virginia had during the last session of the Legislature to compel candidates for examination and license to appear before the Board in session, an apparently unnecessary number of special permits are being granted candidates for examination to appear before special committees. That fight in the Legislature against a bitter minority was too severe, and the victory won by the profession over the ignorance of some and the prejudices of other selfish parties too triumphant for the Board not to be governed by the sentiment of the profession on this subject, ra-

ther than yield to personal appeals for favoritism.

We will await official report, however, before extending comment upon the rumor. But we would caution those in authority, so far as relates to this matter, that the result of the Legislative victory will be lost to the profession and the people if undue liberty is taken with the privileges granted under the law. There are at least two meetings a year of the Board, and it is usually as easy for candidates to make their arrangements to present themselves for examination during one or the other of these semi-annual sessions as it is for members of the Board to quit their practice, leave their homes, and incur the expenses of travel and board regularly twice a year. We urge the Board to examine into

this matter, and, if necessary, put a stop to the cause of the rumor.

The Congress of American Physicians and Surgeons,

Composed of representatives from American Surgical Association, Amer. Climatological Assn., Amer. Laryngological Assn., Amer. Dermatological Assn., Amer. Neurological Assn., Amer. Orthopedic Assn., Amer. Otological Assn., Amer. Assn. Obstetricians and Gynæcologists, Assn. Amer. Physicians, Assn. of Genito-Urinary Surgeons, Amer. Physiological Society, Amer. Ophthalmological Society and Amer. Gynæcological Society seems to be an assured suc-The First Triennial Session will convene at 8 P. M. September 18th, 1888, in the main hall of the Grand Army Building, Washington, D. C., and continue in session through Sept. 20th. Among distinguished foreigners who have signified their acceptance of invitations to be present are Sir Spencer Wells, Sir Andrew Clark, Sir Wm. MacCormac, Dr. W. O. Priestley, Wm. Ord, Grainger Stewart, Mr. Lawson Tait, Mr. Victor Horsley, Mr. Thomas Bryant, Mr. Thomas Annandale, Professors Ferrier, Esmarch, Gerhardt, Drs. Rafael Lavista and J. L. Reverdin. A dinner will be given to the guests on Monday evening, September 17. Members desiring to participate are requested to inform the Chairman of the Committee of Arrangements, Dr. S. C. Busey, 1545 I street, N.W., Washington, D. C., U. S. A. Secretaries of the special Societies above named should forward the names and addresses of their foreign guests to Dr. Busey. Guests, etc., are requested also to notify the Chairman immediately after their arrival in Washington of their addresses, and whether they have ladies with them, as special arrangements will be made for their entertainment. The office, at which all members are requested to register, will be opened in the parlors of Willard's Hotel.

Medical College of the State of South Carolina.

The death of the Dean of this excellent institution, Dr. J. Ford Prioleau, has caused some changes in the Faculty. Dr. R. A. Kinloch has been elected to fill that vacancy. The Chair of Surgery which Dr. Kinloch filled has been divided, so that hereafter he will be Professor of Clinical Surgery, and Dr. Manning Simons will be Professor of Didactic Surgery. Dr. P. Gourdin DeSaussure has been elected Professor of Obstetrics and Gynæcology—the chair held by Dr. Prioleau until his death.

Capital Punishment in New York by Electricity.

Gov. Hill, of New York, has recently signed the bill passed by the State Legislature which abolishes hanging for all murders committed after January 1st, 1889, and substitutes therefor death by electricity. A recent number of the Scientific American gives an illustration and description of the proposed method of capital punishment by electricity.

New York Post-Graduate Medical School and Hospital,

The Seventh Annual Announcement of this institution is out. Address the Secretary of the Faculty, Dr. Clarence A. Rice, 226 E. 20th st., New York, N. Y. During the session 1887–8 there were 337 matriculates—128 more than the previous year. Of the 337 matriculates, Maryland was represented by 3, Virginia by 4, W. Va. 8, N. C. 16, S. C. 2, Ga. 5, Fla. 1, Ala. 6, Miss. 2, Texas 5, Ky. 7, and Tenn. 1. This Post-Graduate School is doing an excellent work, and practitioners who wish to "brush up" will do well to examine its advantages as set forth in this Announcement.

Texas Medical College.

The establishment of this College in Galveston seems to be a certainty. Dr. J. F. Y. Paine, President of the Texas State Medical Association, who served as Professor of Materia Medica and Therapeutics in the Medical Department of Tulane University, in New Orleans, two years ago, is the Professor-elect of Obstetrics.

Obituary Record.

Dr. Rachel L. Bodley,

Professor of Chemistry and Dean of the Woman's Medical College, of Philadelphia, Pa., died at her home in Philadelphia, June 15th, 1888, at the age of 56 years. She was identified with the Woman's Medical College for 23 years, and was untiring in her efforts to develop its usefulness. As a teacher she was distinguished. She was born in Cincinnati, Ohio. She willed all her scientific books to the College.

Dr. J. Milner Fothergill,

The illustrious English medical writer, has recently died from gangrene of the feet. He was a very corpulent man, and was the subject of diabetes. He had, for some time before his death, suffered from perforating ulcer of the foot.

VIRGINIA MEDICAL MONTHLY.

VOLUME XV—No. 6.

WHOLE NUMBER, 174.

RICHMOND, SEPTEMBER, 1888.

Priginal Communications.

ART. I.—Cancer of the Testicle, Mesenteric Glands, Stomach and Liver. By JOSEPH JONES, M. D., Visiting Physician of Charity Hospital, New Orleans; Professor of Chemistry and Clinical Medicine, Medical Department Tulane University of Louisiana

The following cases of cancer present some points of interest:

CASE.—Cancer of Testicle and of the Mesenteric Glands.

William Roberts, age 37, admitted into ward 13, Charity Hospital, bed 216, November 10, 1881. Patient was born in Mississippi; during childhood moved to Arkansas, and from thence came to Louisiana at the age of 19 years, and resided in East Baton Rouge. Accustomed to hard work, temperate habits, uses neither tobacco nor whiskey; regarded himself in good health until June, 1881, when he was attacked with typhoid fever. During the period of convalescence, a tumor or swelling was observed in the abdomen, which continued to increase in size. Patient says that his father and mother were healthy. Roberts was sent by his attending physician to the care of the author, in the Charity Hospital, on the 10th of November, 1881.

Upon examination, I found the abdomen greatly distended by a large nodulated movable tumor—that is, some

26

of the nodules were movable upon manipulation. Palpation and percussion revealed the fact that the abdominal cavity contained little or no free fluid. Aspiration resulted in the evacuation of only small quantities of bloody fluid.

The left testicle was enlarged, forming a nodulated and slightly fluctuating tumor, about 3½ inches in diameter. The patient stated that this tumor had existed for many months, and perhaps had commenced to form at least two years before the attack of typhoid fever, and the rapid growth of the abdominal tumor.

Appetite good, and the stomach retains all the nourish-

ment administered.

The tumor continued to increase daily; the distress from the tension of the abdominal walls, and the forcing up of the diaphragm, continued.

Patient died November 22d, 1881, twelve days after his

entrance into the hospital.

Post-mortem examination revealed the presence of a large nodulated *encephaloid* cancer of the mesenteric glands, which filled and distended the abdominal cavity, and weighed about twenty pounds. The tumor (or rather series of tumors) was firmly attached to the posterior wall by the abdominal cavity. When cut, a brain-like substance exuded

The testicle, upon dissection, was found to be a mass of encephaloid cancer, and contained the same brain-like substance. All the mesenteric glands along the track of the spermatic cord of the left testicle were enlarged with the same cancerous matter. The liver contained several small abscesses. The left kidney was atrophied from pressure of the tumor; the right kidney was hypertrophied. Spleen enlarged; heart and lungs healthy. All the mesenteric glands of the abdomen were enlarged and cancerous.

The diagnosis, cancer of the left testicle, and of the mesenteric glands, made in the amphitheatre by the medical class of 1881–82, at the time of the examination of this patient, immediately after his entrance into the Hospital, was con-

firmed in the dead house.

In this interesting case, it is reasonable to suppose that the left testicle was the starting point of the cancerous disease, and that the supervention of typhoid fever promoted the rapid dissemination of the cancer cells. CASE.—Cancer of Stomach and Liver.

A. W. King, native of Franklin, Tenn., age 60, admitted to ward 14, Charity Hospital, November 13, 1881. Has been in Louisiana about one month. Occupation, printer and editor. Can give no history of his father and mother with reference to their health. Says that he has been a hard drinker all his life; nevertheless has enjoyed good health until about six months before entering the Hospital.

Upon examination, the patient was found to be suffering with incessant vomiting and great prostration, which he stated had commenced about six weeks before, during which time he had been unable to retain anything on his stomach.

A hard tumor occupies the epigastrium, right and left hypochondriæ, and portions of the umbilical and right and left lumbar regions. The tumor was hard and nodulated upon the surface, flat on percussion, and without fluctuation. I pronounced this tumor to be a scirrhous cancer of the liver.

Patient stated that he had never vomited blood, but ejected everything he ate shortly after its entrance into the stomach, and exclaimed, "I am hungry all the time, and am dying of starvation." Complains of sharp, lancinating pains in the tumor and stomach.

The effort was made to sustain life by the injection of beef-tea and milk into the rectum. Sulphate of morphia (3d of a grain) was injected subcutaneously at regular intervals to relieve the pain.

From the fact that food is received into the stomach and then rejected, and from the fact that no food passes downwards, the conclusion was reached that the pyloric extremity of the stomach, as well as the superior portion of the pylorus, were the seat of a scirrhous cancer.

The diagnosis announced by the medical class at the clinical lecture, with the patient on the table in the amphitheatre, was cancer of the pyloric extremity of the stomach, and the superior portion of the pylorus and of the liver.

The effort to sustain life by means of nutritive enemata was only partially successful. The powers gradually declined, the emaciation was extreme, and the patient died, apparently from starvation, on the 21st of November, 1881, eighty days after his entrance into the Hospital.

On post-mortem examination, the brain, heart and lungs,

and in fact all the organs, with the exception of the stomach and liver, were normal. The pyloric extremity of the stomach and the superior portion of the pylorus were occupied by a scirrhous cancer, which completely occluded the pyloric orifice, and precluded the passage of solids or liquids from the stomach into the intestinal canal.

The enlarged, nodulated, cancerous liver formed the hard tumor occupying the region above described. When sections of the liver were made, it was evident that cirrhosis and fatty degeneration of the organ co-existed with the extensive invasion of the organ by the cancerous cell structures and deposits. The cirrhosis and fatty degeneration were due most probably to the excessive use of alcohol, and most probably antedated the supervention of the cancer of the stomach and liver. It was not possible to trace any relationship in cause and effect between the extreme use of alcohol and the development of cancer.

ART. II.-Salol.* By WM. S. STOAKLEY, M. D., Bay View, Va.

In the month of September; you'll remember A fellow; when he his promise fulfills, To give you his views of the medical news, Tho' they be as old as the hills.

To-day, I have something to say,
About a new remedy called salol;
It's a "lively affair," I do declare,
And one which I can extol.

If you ask what is it? I'll be explicit,
'Tis related to the remedy for the "shivers,"
And kin to the trees, which every one sees,
Growing along all the rivers.

^{*[}While the subject inspiring our worthy correspondent to rhyme is important enough to call for prose, it may be that some of our readers will be more impressed with the virtues of this drug by seeing some of them stated in rhyme in a journal whose Editor almost invariably runs his pen through all lines in manuscript that have poetic appearance. To those who may think the style of publication not in keeping with the value of the drug, we may remark—

SALOL. 385

In its turn, introduced by Nencki of Berne As a salicylate of phenol; By Sahli used, and not abused, As some of the preps: carbol.

Forty per cent. of phenic acid, 60 of salicylic, With a faint odor Of old carbol, which we extol, And thank so graciously the donor.

The truth to tell, I believe full well,
For the "rheumatiz" man's sake;
Of all the medical things the mail-bag brings,
Salol takes the cake.

In a few hours, it the whole system scours
Thro' every blood-vessel large and fine,
And doesn't disdain to ease the pain,
And pass off by the urine.

It's like a ferret, with every merit,
To hunt out the pain;
And catch the rat, or make him "seat,"
You may bet for sure and certain.

For a rheumatic pain it's a great gain Over anything I've yet found; In ten-grain doses it marshals its forces, And scatters the enemy around.

Three times a day is the way
I give it in the above doses;
And sure as a gun, it seems only fun,
To scatter the enemy's forces.

It's innocent too, I can tell you,
And doesn't flash in the pan,
Doesn't explode, or any way incommode
The stomach of any man.

For a pain in the toe, it will straight go, Or chronic angiua as well, Any muscular sore where pressure o'er Causes pain, and is likely to swell.

Medicine the world o'er is medicine,
And should be used with discretion;
In any other way we may regret the day,
We tampered with any preparation.

It's well to say, at this late day,
We have certainly no specific,
And natural law, will always awe,
Every quack with "stunners" terrific.

Mechanical law may have a flaw, But natural law has none; And medicine's a science which bids defiance, To earth's biggest charlatan "gun."

Forever more we must "crab along shore," As poor mortal man should do;
Not venture the deep, or peer from a steep,
Too giddy to appreciate the view.

Clinical Reports.

A Queer Case of Malingering—Cantharidal Eruption, etc. By J. HARRIS PIERREPONT, M. D., Late Resident Physician City Hospital, Richmond, Va. Temporarily at Winter Haven, Polk Co., Florida.

The following case I hope will be of interest to the brethren, if not of benefit to some one who is being misled by a wily patient, while he is under the impression that he has encountered a difficult case; for it shows how cunning a person, wishing to deceive the doctor, can be. True it does not reflect much credit upon the shrewdness of the physicians who had charge of the case; yet I feel it my duty to publish it:

When I entered upon my duties at the hospital last May, Dr. I., the retiring physician, gave me the following history

of the case in question:

L. W., a white woman, unmarried, aged about 22 years, was admitted about eighteen months previous for a sprained ankle. Excepting the sprain, which was a simple one, she was otherwise in perfect health, weighing then about 160 pounds. Dr. S., who was then in charge, treated the sprain by counter irritation, using a fly blister.

The case progressed favorably, but when Dr. S. informed her that she could take her discharge the next day, that night she had what she termed, a "breaking out" on the left forearm from the elbow to the wrist. On examination the Doctor found the arm covered with large bullæ which very much resembled pemphigus. After letting out the serum, a soothing application was used, which caused the

raw surface to heal in about a week.

When the Doctor again spoke of discharging her, there was a recurrence of the eruption on the right arm, resembling in every respect the former attack, and which was treated in the same way. The vesicles were exactly like those produced by a fly blister, some of them measuring as much as two and three inches long. This state of affairs continued during Dr. S.'s administration—no remedy he used benefiting her in the least, and the eruption continued to make its appearance on one arm as soon as it disappeared on the other.

Dr. S. was succeeded by Dr. R., who experienced the same difficulties in treatment, and with the same result, no cure. The only change was that the eruption, which had previously confined itself to the arms, now attacked the legs in the same way, from the knee to the ankle.

Dr. R.'s term expired leaving her in the same condition

in which he found her.

Dr. I. succeeded Dr. R., and during the absence of Dr. I. a few months, Dr. F., who was in charge of a neighboring ward, filled his place, and met with the same experience in L. W.'s case.

This was the state of affairs which confronted me when I succeeded Dr. I., and it must be admitted that I entertained very little hope or expectation of effecting a cure. However, in duty bound I soon exhausted my stock of remedies which I thought applicable, with the same result, no cure.

Dr. Trevillian, the surgeon in charge of the Hospital of the Alms House, and one of the ablest physicians in your city, watched the case with as much interest as the internes. He also tried various remedies, and it was during the administration of one, and by the way the last he said he could suggest, that the case came to an abrupt termination.

The last eruption had involved the right knee, and after evacuation of the serum, had left an extensive raw surface which was unusually painful. When this had healed, and it appeared that she would be well enough in a few days to take her discharge, the nurse came to me in great haste and reported L. W. dying. Upon reaching her bedside, I found her in a state of profound coma; pupils normal but insensible to light; respiration very shallow and jerky; radial pulse barely perceptible and dichrotic; surface cold and clammy,

and covered with large drops of perspiration; prolabia

cvanosed.

Cardiac stimulants were immediately administered, among which may be mentioned nitrite of amyl by inhalation, whiskey hypodermically, hot bottles to extremities, etc. Her pulse and respiration improved, but she remained unconscious until five o'clock the next morning. (The attack occurred at six o'clock the previous evening.)

Her aunt who lived in the city was summoned, and on arrival was told of her niece's critical condition. Whereupon she requested the nurse to prepare the patient's effects

for removal in the event the attack proved fatal.

On opening a bundle of clothing that the patient always kept under a table at the head of her bed, a fly blister about a foot wide by two long was discovered and the mystery solved. The blister was made of two thickness' of cheese cloth, with the fly ointment (a kind that is kept in the wards ready for use) in a thin layer between, so that she could apply it at night and remove it the next morning before any one observed her. A supply of the ointment that had been stolen from the nurse a few months before, was also found in the bundle.

After the effects of the poison, which had been suspected, and afterwards confirmed, had left the patient in a condition to be questioned, she made a full confession, and stated that she had stolen some medicine from the nurse's safe, and had taken it in preference to using the blister, her object being to make herself sick enough to remain in the hospital where she fared better than she would in the "poor house," where she would go when discharged. This appeared her sole reason for, as she expressed it, "fooling the doctors."

The medicine referred to was a compound prepared in the hospital containing bromide of potash, hydrate of chloral, fld. ext. of gelsemium and tinct. of hyoscyamus. The quantity taken was about five times the maximum dose.

Another point must be mentioned here which added to the obscurity of her supposed disease, but which should have aroused our suspicions, viz.: Whenever the eruption occurred she complained of severe pain in her kidneys, at which times her urine had a peculiar pinkish hue, and on standing deposited a white sediment, about an eighth of an inch in an ounce phial. But the analysis of the urine proved unsatisfactory. Specimens examined at varying intervals gave the following results:—Slightly acid reaction, sp. gr. normal; no albumen, although it had the appearance

of containing blood, nor could any discs be detected when subjected to microscopical examination. The deposit proved to be calcium, probably pink face powder, which would account for the color imparted to the specimens. I arrived at this conclusion from the fact that, when the blister was discovered my suspicions were aroused as to the probability of the urine being tampered with before it was given to the nurse.

Acting upon this idea, I took a catheter and a phial to the ward to obtain a specimen from the bladder. (This occurred the morning following the attack and before she was questioned.) When I told her I wished to make an examination, she asked permission to go to the closet to prepare for it. Not suspecting any more tricks I consented. Upon introducing the catheter, I found to my surprise, she had completely emptied her bladder, having perceived my intention from the phial and catheter.

Being satisfied now that my suspicions were correct, the catheter was left in situ until a drachm was secreted, which

was found to be perfectly normal.

Remarks. The pain she complained of in her kidneys, was no doubt caused by the blister, and was real. It is certainly a wonder that the continual application of the blister did not set up organic change, since there was considerable inflammation following every application of the blister.

Another remarkable feature which was not understood, but was wondered at previous to the above disclosure, was that the eruption invariably made its appearance at night.

Reduction of Strangulated Hernia by Ice Poultices without Taxis or the Knife. By ALBAN SMITH PAYNE, M. D., Late Professor of Theory and Practice of Medicine Southern Medical College of Atlanta, Ga. Resident Honorary Fellow Medical Society of Virginia, etc., Markham, Va.

Case I.—During November, 1849, I was called to see Gen'l R., in consultation with his family physician, Dr. George M. Brown, of Upperville, Va. I found the old gentleman with a strangulated inguinal hernia, apparently in articulo mortis. He was pale, cadaverous in appearance and shrunken, although you could see that in early manhood, he had been of splendid physique. He was then

above 80 years of age. Dr. Brown had been up with him all night, had tried taxis, and having exhausted all remedial measures, he told the General's son frankly that from his father's extreme age he could not stand an operation, and the case was therefore hopeless. When I reached Col. R.'s, everything looked gloomy enough. But I at once ordered a bag of ice to be applied over the tumor, and as soon as I thought the cold application sufficient I quickly followed the same by a large hot poultice. When I removed the poultice, I made gentle massage over the whole abdomen. In a few moments, he had an action from his bowels, and the hernia was reduced. This old gentleman a short time afterwards travelled in a carriage all the way to Arkansas, and lived several years without any further trouble from his hernia, dying finally of extreme old age, upwards of 90.

Case II.—David Trissler, over 80 years of age. I found the old man in a deplorable condition. As soon as he recognized me, he whispered, "Yes, you know, Payne, the old man must die. He has sneaking chills and high fevers. Yes, the doctors have been here all night; they say the old man must die; that his bowels is mortified. Yes, Payne, you know the old man will give you one thousand dollars if you relieve him," etc. When I saw the stercoraceous vomiting which, by the by, was present also in my first case, I thought the old man's chance for life blue. I applied a bag of ice to his hernia. When the parts were cold enough, a large, hot, greasy poultice was applied all over his bowels. I was naturally elated by the contemplation of so fat a fee, for I knew he had a plenty of money and no relatives to leave it to. As I was gently using massage over his bowels, I felt the tumor receding, I rested a moment. The shrewd old Dutchman took advantage of my moment's rest, slipped his hand down on the receding mass, and said, "Yes, you know, Payne, its gone back itself. Yes, you know the old man feels as well as he ever did, surer than life. Yes, the old man must get up and attend to business," etc. He lived to be 91 years of age, I stayed every other night with him for a year before he died; he never had any more trouble from his scrotal hernia. Drs. Barton and O'Neil had been with him all the night before the attack spoken of, and gave it as their opinion that he must die; that he was too old and feeble to use the knife, and they had exhausted all other remedies. But he did not give me the promised \$1,000.

Case III.—I saw Dorety, colored, aged 30, strong, muscular, powerfully built man, in the fall of 1857. I gave him

injections of tobacco infusion, tried taxis to my heart's content, gave a one grain dose of gum opium, all to no effect. After having worked on Dorety all day, suddenly in the evening stercoraceous vomiting supervened, and his appearance was so bad that I was forced quickly to apply the ice bag, which was followed by a big, greasy, fat and mush poultice. I then gently rubbed him all over his bowels, and in a very few moments there was a desire to go to stool. By bringing on this peristaltic action of the whole tract of the bowels, the strangulated scrotal hernia was lifted upwards and backwards, and Dorety was all right. He is yet

alive, to speak for himself.

Case IV.—One of our most prominent citizens consulted me about four years ago concerning an inguinal hernia. I found the aperture very small, and I advised a carefully fitted Ayres' Hernia Truss, whose make I saw recommended by my friend, Dr. Hunter McGuire. In about one year after he had been wearing the truss, he sent for me one night in great haste. I found him suffering severe pain, and great tenderness of the hernial sac, which was evidently caused by slipping of the truss and catching the bowel, and holding it outside. His countenance was bad—Hippocratic. Without delay, I applied the ice bag, and then the large, greasy, hot poultice, and used gentle massage. He quickly said, "I feel like going out." In a few moments he returned laughing, saying, "I am all right;" and sure enough he was. The gentleman is about 43 years of age, and his constitutional diathesis peculiar.

In the last forty years I have met with occasional cases of strangulated hernia to the number I suppose of a baker's dozen. In no case has my plan failed to give speedy and

complete relief to the sufferer.

My theory is that, by bringing on peristaltic action of the whole tract of the intestines, you compel Nature to do the work, and by Nature's efforts (always in the interest of health) the gut is lifted upwards and back, more easily and better than by either rough taxis or the surgeon's knife.

A Perfect Liquid Cathartic.—I have been using your Elixir Purgans in my practice, and find nothing to equal it as a cathartic and laxative for women and children.—A. E. Haskinson, M. D., Columbus, Ohio.

Guropean Correspondence,

Antiseptic Treatment of "Surgeon's Wound"—Notable Medical Men of London—In Paris—In Berlin—Bergmann and his Treatment of Tubercular Arthritis—Extirpation of Scrofulous Glands—Dr. Engelman—Olshausen and Dr. Martin—Conclusion.

Mr. Editor,—This letter should have been sent you from London, but owing to my absence from that city for six weeks on the Continent, I have always postponed its completion. In my last letter I spoke of certain prominent medical men of London who now appear to be among the leaders in theory and practice. If I had no other theme I could fill many pages of the Monthly with the prominent characteristics of each.

Before leaving this part of the subject, I wish to allude to antiseptics again; and in doing so will relate how one of the best known of medical writers happened to wound his finger during an operation for sarcoma or carcinoma of the breast. The gentleman at once retired from the operation, handed his scalpel over to an assistant, then placing his finger in a bowl of solution of mercuric bichloride, washed it well, and then, after strong and repeated suction with his lips, again washed in the antiseptic. He then powdered it with iodoform, and dressed it with an antiseptic pad and bandage, etc. The wounded operator then refired from the scene of action like a wounded warrior, leaving his comrades to complete the work of the day. The whole scene was one of interest, not to say of amusement to the visitor. The pale and anxious face of the wounded man, the eager and hurried attendance upon his trifling wound by the assistants, the resort to the mighty antiseptic, and such trepidation, afforded a rare scene for an artist to sketch, and I regret that I cannot portray it as it appeared to me.

I find it a difficult task to tell of the notable men of London without displaying a preference for those who were kind to me, and who furnished me every opportunity to see and learn.

Mr. Edmund Owen, of St. Mary's and the Children's Hos-

pital in Great Ormond street, was especially kind. He visited America last year and attended the International Medical Congress in Washington. I consider him one of the brightest and most gallant Englishmen I have the pleasure of knowing. The whole staff at St. Mary's Hospital are uniformly hospitable in their treatment of visitors.

Mr. Harry Fenwick, of the London and St. Peter's Hospitals, is another gentleman rapidly rising into prominence, and is perhaps well known to your readers as the author of various recent papers on the use of the endoscope in diseases of the bladder. I had the pleasure of witnessing its use, and of trying to see through it; but while it illuminated the cavity of the bladder beautifully, I could see no disease. I am quite willing, however, to believe his testimony as to its usefulness.

I must also mention just here Mr. Leopold Hudson, Lecturer on Pathology at Middlesex Hospital. I enjoyed the privilege of his private instruction in microscopy and pathology, during my stay in London, and believe he is another of the young and aggressive men who will surely win fame for themselves.

Mr. J. Bland Sutton is now paying almost exclusive attention to surgery, and thus leaves the field of pathology open to Mr. Hudson in this medical school at least Mr. Sutton is now considered one of the most expert colotomists in London, and is already popular as a clinician. I do not like one feature of his clinics, however, in that he is fond of satire, and he makes his brilliant sallies amusing to the students at the expense of the poor wretches who are seeking his skillful aid.

Early in May I concluded to go on the Continent to see something of medical practice in a few of the chief medical centres, and first visited Paris. I will not detain you with an account of what I learned there, as I was not impressed with the idea that the methods of the leading men there are any better, if as good, as in England. I paid a short visit to Pasteur's Institute and learned nothing to check my already growing skepticism of the reliability of the inoculations. Besides not approving of many things witnessed in

Paris Hospitals, there are so many attractions in the beautiful city to divert one's attention from medical subjects, that I soon departed for Berlin, where there is so much of interest to the student.

For many reasons Berlin is becoming the most important medical centre in Europe. In fact, its only rival is Vienna, where the short courses of instruction are so very popular. My stay in Berlin was during the great excitement in medical circles about the Emperor's health, and the attending surgeons, Mackenzie vs. Bergmann. It was quite evident that the latter was the hero of the hour, as shown not only by the homage paid by a vast throng of students, but by the papers and street and hotel talk.

My first visit to a clinic in Germany was at 2 o'clock P. M., to see Bergmann. When I entered the theatre there were but few students there, and I took a seat, and waited for the usual quarter of an hour after the announced time. Soon the students entered in throngs until I was asked by a big fellow with a long ugly scar on his face, to vacate his seat, which I did without a second's hesitation, after noticing his physiognomy. I soon learned what I had often read, that these students are almost without honor (?) until they have scars to show their trial of the sword. On a careful scrutiny I concluded that fully one-half of these men had scars which could be seen across the large theatre, and nearly all of them smaller ones. One of Bergmann's chief assistants has a very prominent nose which appears to have been hewn down and built up again, no doubt done by a skillful hand.

I was particularly impressed with Bergmann's treatment of tubercular arthritis. For instance, given a man with an enlarged suppurating knee-joint. It is already partially anchylosed, and the patient is emaciated and bedridden, perhaps a confirmed invalid. The joint is opened by transverse incision, the tubercular tissue all removed, with a general cleansing of sinus, and pus pocket with all the cartilage, etc. The wound is temporarily closed, packed with iodoform gauze, and placed in a splint, to be later on put in plaster-of-Paris permanent dressing. I felt a little shocked

at this bold treatment, at first, but there is satisfactory proof in the wards to show its wisdom. Patients are soon rid of the exhaustive discharges, and improve at once, as shown by their ability to take exercise, etc.

I noticed that enlarged scrofulous (tuberculous) glands were extirpated without loss of time by the use of iodine. In one case a young girl had both sides of her neck completely denuded of skin, and a rigorous search for the glands was made, which were dissected out thoroughly The wound was packed with iodoform gauze and temporarily closed, to be opened in four days for the first time, then dressed and permanently closed. I had previously noticed in London that these glands were treated by curettization, but the Germans are more radical in their dealings with almost all cases.

I had the pleasure of meeting with Dr. Engelman, of St. Louis, in Berlin. He had unfortunately to bring his sick wife to Berlin to receive treatment at the hands of Dr. Martin (his former fellow-student.) She was at that time, I am glad to say, much better, having safely been operated upon by the distinguished surgeon.

It is interesting in Bergmann's clinic to see three operations in various stages of completion proceeding all at the same moment. The first patient is operated upon and passed over to the first assistant who completes it. Another patient is then brought in chloroformed ready for treatment, and he is generally ready for a second corps of assistants before the first is out of the rooms. Then a third patient is brought in and is being operated upon, so that one can see three performances in one arena. Very many of the students have opera-glasses, which afford great assistance in looking on at a distance, as I had an opportunity of testing.

I visited Olshausen's Hospital at 7 A. M., and Martin's at 11 A. M. each day while in Berlin, when there were operations. Notice is sent by the porter if you leave your address and fee. There is nothing in his manner of operating so different from that done at the Samaritan Hospital. He requires that visitors wear clean white coats which are prepared for them. Both Olshausen and Martin use the spray

at eleven o'clock Dr Martin visits his private hospital, and at that hour does any operation which may be required. I had the pleasure of being present one morning and of seeing him do two ovariotomies and one tube case (Tait's operation) in less than an hour—one ovariotomy requiring only seven minutes. We were kept in a dense cloud of carbolic spray during the whole time of waiting, before, during and between operations. As is so well known Dr. Martin sits at the foot of the table between the patient's legs, his assistant on his right and consequently on the patient's left. A nurse stands at the right of the patient and hands sponges, instruments, etc.

Dr. Martin once took me through his wards to show the results of his work. There was in no instance a rise of temperature, according to the chart on each bed. In view of his apparently hasty manner of operating this looks almost magical, but there is a remarkable attention to details, which is done without the visitor's recognizance, and which assures the good result. I was greatly pleased with Olshausen and Martin, the more because they both speak English, and make every effort to explain their methods to strangers. With these three far famed men I must close my account of my visit to Berlin.

I once visited Gusserow's Clinic, but for the most partpreferred to follow closely those mentioned rather than merely to take a look at each one.

I will not detain you with my experiences at Vienna, where I spent only a few days. I found, what I had previously learned, that the doctors who attend the clinics, are expected to take special courses, and as I had no time for that, soon left on a short tour through Italy and Switzerland and back to London by June 14th. I found many new faces among the visitors at the Samaritan Free Hospital, where I had spent more than two months of my time under the instruction of that beautiful operator and kind friend, Dr. Geo. Granville Bantock. I found the city of London the most profitable place for study to all those who do not readily understand a discourse in German.

And now I close this letter, fully aware of its many im-

perfections, and asking a generous forgiveness on the part of those who may read it. With thanks for your indulgence in permitting me to take so much of your valuable space, I remain. Yours truly.

I. S. STONE, M. D.

Lincoln, Va., August 15th, 1888.

Original Translations.

From the French. By R. M. SLAUGHTER, M. D., Theological Seminary, Va.

Cancer of the Larynx.

Dr. J. Baratoux has in Le Progrès Médical, Vol. VII., Nos. 20, 22, 23, 25 and 28, a lengthy and valuable critical review of this subject from which we extract as follows:—

Under the name of cancer of the larvnx is included all malignant tumors (sarcomas, epitheliomas and carcinomas) which primarily attack this organ or reach it by extension

of the neoplasm from neighboring tissues.

Up to the time of the discovery of the laryngoscope but little had been written upon the history of malignant tumors of the larynx. An autopsy was necessary to confirm a diagnosis. But, the laryngoscope having been discovered, the divers diseases of the larvnx could be studied in the

living subject and their nature and seat recognized.

Through the labors of many observers reports of cases multiplied and symptomatology became gradually clearly defined. The earlier writers recommended only excision of the tumor by the larvngeal method, tracheotomy or larvngotomy. Billroth, on 31st of December, 1883, performed the operation of total extirpation of the larynx as Watson had already done in 1866 for syphilitic stenosis of that organ. In 1878, Billroth introduced the operation of partial extirpation of the larynx.

Cancer does not appear to attack this region very frequently. Krishabor reports 50 cases, while Mackenzie has seen 53, and Ziemssen 70. Fauvel has only been able to collect 40 cases in 12,360 patients; only 8 cases presented themselves at Semon's clinic in 1888. Dr. Baratoux him-

self has seen only 13 cases in 3,800.

As regards the seat of the neoplasm, these tumors are classed

as intrinsic or extrinsic according as they occupy the laryngeal cavity or are developed in the parts above the larynx.

The intrinsic cancer usually has its seat upon a level with the ventricular bands (false vocal cords) the vocal cords (true), or, in the ventricles of Morgagni. It very rarely de-

velops below the cords.

The extrinsic form is found chiefly upon the epiglottis, more rarely, at the level of the arytenoides upon the posterior commissure and the aryteno-epiglottic folds. It is the general opinion of authors that the intrinsic cancer is the much more frequent form. The neoplasm usually occupies only one side. Turck says that the unilateral cancer is three times more common than the bilateral. The left side

appears to be more often attacked than the right.

Sarcoma. Of the three forms of malignant tumors considered, sarcoma is certainly the least frequently encountered. It appears usually upon the vocal cords, but sometimes upon the epiglottis, posterior commissure and arytenoepiglottic folds. The tumor is more or less voluminous, generally perceptible and rarely ulcerated. The fasciculate sarcoma is generally found, and sometimes the fibrous tissue is so abundant that the tumor may be taken for a fibroma, if a minute histological examination is not made. The globo cellular variety less frequently occurs. This form rapidly invades the tissues (Hahn). In some cases, there are mixed sarcomas; that is to say, they are composed of embryonic and fusiform cells (Boltini, Foulis). Czerney and Hahn have seen a lympho-sarcoma; D. Newmann and MacLeod have seen an alveolary sarcoma, and E. Carroll Morgan a myxo-sarcoma.

Carcinoma and epithelioma. Cancer is much more common than sarcoma, and comprises nearly all the cases of malignant tumors reported. It is most frequently intrinsic. In 167 cases noted its seat is as follows, as shown by the lo-

cation of 117 cases of:

Intrinsic cancer.

Vocal cords29	Sub-glottic region8 Posterior commissure6 Ventricles of Morgagni4
T7	

Extrinsic cancer, 50 cases.

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The industrial 2011	A mystom a amindattic folder
Epiglottis32	Arvieno-edigiothic loids
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Arytenoid region 9	1 VIIIUIIII SIIIUS

To this table we can add 18 cases in which the larynx was attacked on one side and 32 where it was entirely invaded.

The post-mortem appearance of the neoplasm is that of a circumscribed tumor of variable size, having the form of a papilloma more or less pediculated or as a diffuse infiltration in the pharyngeal wall. The mucous membrane is red, softened, fungous, infiltrated, ulcerated and covered with sanious or sanguinolent pus. The sub-mucous tissue is equally infiltrated, thickened and inflamed. According to the seat and volume of the neoplasm, the lumen of the aerial conduit is more or less obstructed. If seated upon extrinsic parts it covers the upper orifice of the larynx; while, if intrinsic it causes a contraction of the glottis. The lesions vary with the period and rapidity of development of the neoplasm. The muscles may be invaded by the cancerous infiltration and the cartilages are altered, being ossified and calcified. Sometimes they thicken and project, taking on the aspect denominated by Isambert as the turtleshell. If invaded by the tumor they are transformed into cancerous tissue, either directly or by successive changes.

Generalization of laryngeal cancer is rarely observed. This is due to the incomplete manner in which autopsies are made. Only a few cases are known. Sands has seen neoplasm of the larynx followed by cancer of the suprarenal capsules, kidneys and ureters. Desnos has seen cancer of the liver consecutive to an analogous tumor of the aryteno-epiglottic folds; and Isambert has noted the presence of a cancer of the prepuce in a patient attacked with epithelial cancer of the larynx. Some other cases have been ob-

served.

Epitheliomata generally arise in the interior of the larynx and most frequently upon the ventricular bands, and next upon the vocal cords which they may attack symmetrically. It is very rarely seen upon the epiglottis or parts above the vocal organ. Carcinoma seems to be much less frequent than epithelioma. The German writers designated under the head of carcinoma the epithelial carcinomas as well as the carcinomas proper which renders research very difficult in their observations as to the varieties of cancers.

In the greatest number of cases carcinoma arises in the parts above the larynx, and are of the encephaloid variety. Mackenzie has seen two cases in which the tumor was of

fibrous or scirrhous nature.

Etiology. The causes of cancer of the larynx are not better known than those of like tumors in other localities. Various causes have in turn been invoked, such as irritation and fatigue of the vocal organ (tobacco, alcohol, too much

speaking, etc.), arthritism, etc. These causes appear to be of little value. Perhaps in future the true etiology may be found in a bacillus. For the present we must content ourselves with the knowledge that in certain cases it can be transmitted by heredity. In many cases hereditary antecedents are to be found. Cancer of the larynx also sometimes occurs secondarily to cancer of another organ.

The co-existence of laryngeal cancer and tuberculosis can no longer be denied, for many such cases are reported. In some cases the tuberculosis precedes the neoplasm, while in a certain number it supervenes only in its terminal period. Sarcoma appears chiefly between the ages of 30 and 60; more than half the cases occur between 40 and 60. Cancer also occurs most frequently between 40 and 60; more than two-thirds of all cases are found between these two periods. Dr. Baratoux' youngest case occurred at 2 years old, and the oldest case reported was in a man of 82 years. Cancer, however, very rarely appears before the age of 40. As regards sex, malignant tumors are much more common among men than women.

Symptoms. The symptoms vary with the three periods of the disease. The first or irritative period is characterized by slight difficulties of phonation and respiration, differing but little from the troubles of the same nature produced by catarrhal laryngitis. The second or ulcerative period is that in which appear dyspnæa and dysphagia, arising from the development and ulceration of the tumor. The third is the cachetic period, as is characterized by general waste of the

organism.

In its beginning, the disease is nearly always latent, or at least, the symptoms are so slight that the patient pays but little attention to his disease. Generally the voice troubles first attract the attention of the patient, though these may exist for several months or even years before he consults a physician. The voice at first husky, becomes harsh (raugue) and hoarse (enroevèe). Aphonia is very rare in the beginning. As the vocal cords or the neighboring parts remain intact, the voice remains normal. If there is dysphagia, there exists a lesion of the recurrent nerve. When ulceration occurs, the voice loses its intensity, and the aphonia leads one to suppose that both sides of the larynx are involved. Lubbinski remarks that the aphonia of cancer is less marked than that of tuberculosis. Difficulties of respiration come on very slowly, and in the beginning are very slight, and are so only from exertion and fatigue. In the

second period they are more marked, are characterized by dyspnœa, which, however, is not always proportionate to the amount of contraction of the larynx, but more to the extent of compression of the recurrent nerve, anchylosis, destruction of the crico-arytenoid articulations, etc. There is considerable cough during the irritative period, but this is suppressed later on through either established tolerance or invasion of the laryngeal nerves. Expectoration, at first frothy and not abundant, becomes sanious, purulent and fetid as ulceration progresses. The sputum contains sometimes particles of the tumor and streaks of blood and may even be bloody. Blood may appear a long time before the advent of grave complications, being in the large majority of cases, the result of ulceration. Generally the hæmorrhage is not abundant, but it is frequent and may sometimes cause death. Salivation is sometimes increased in the beginning, coinciding with the dysphagia caused by the presence of the tumor in the supra-laryngeal region. It generally becomes abundant only in course of the ulcerative period and when the tumor is extrinsic. This secretion, clear in the beginning, becomes viscid, fetid and purulent. The flow is continual and of great inconvenience to the patient. The breath becomes very fetid and disagreeable to by-standers. According to the seat of the neoplasm, difficulty in deglutition is early or late in making its appearance. It appears early if the cancer occupies the epiglottis or the parts above the larvnx, and the voice is then generally little altered. The dysphagia is usually of only mechanical origin. Solids are at first swallowed with difficulty and next liquids, while semi-solids yet pass more easily. Dysphagia is late in appearing when the tumor is intrinsic. It is also more slow in appearing as the left side of the larvnx remains healthy.

If the esophagus is attacked, alimentation is rendered almost impossible by contraction of that canal. Difficulty in swallowing increases during the second period, and is most frequently caused by the exaggerated sensibility of the organ. It is most marked when the posterior wall is ulcerated or edematous. Pain renders alimentation impossible

(odynophagia) causing rapid general waste.

Pain is not a constant symptom in the first period—the larynx being then not sensitive in itself or by compression. At the level of the tumor there may be sensations of pricking produced by coughing or speaking. Later there appears at this point a spontaneous, intermittent pain, which

becomes continuous, dull or lancinating. It quite frequently radiates to the face, temples, ears and to the submaxillary and cervical glands. Pain is increased considerably by swallowing. It reaches its greatest degree as the neoplasm ulcerates, but in proportion as the epiglottis is destroyed, the sensibility of the organ diminishes. The general condition remains good for quite a long period, but when ulceration occurs, the pain and salivation cause weakening. The cachetic period comes on more rapidly as odynophagia is greatest. The patient presents the straw-yellow tint characteristic of cancer, and if tracheotomy has not been done, the patient dies of asphyxia, inanition or pulmonary com-

plications.

Objective Symptoms.—Palpation: The larynx may be increased in size from hypertrophy of one or both sides, projecting in front, or having that turtle-shell appearance, which is not always characteristic of cancer of the larynx, as was thought by Isambert. Often the contour of the organ cannot be clearly determined on account of the inflammation of the cartilages and peripheric tissues. Palpation of the larynx provokes often such acute pain as to indicate ordinarily a perichondric lesion. According to Krishaber, cervical adenopathy occurs only in cases of extra-laryngeal cancer—a rule far too absolute to be accepted, for cases of involvement of the cervical glands have been observed in intrinsic cancer and cancer of the whole organ. The glandular enlargement is, however, more common in the extra-laryngeal neoplasms, and is usually unilateral.

If the cancer is extrinsic, the first ganglion attacked is to be found upon the anterior border of the sterno-mastoid muscle on a level with the space separating the hyoid bone and the thyroid cartilage. Adenopathy is rarely of early

appearance.

The affected glands may attain considerable size, and, by pressure, embarrass respiration; or they may adhere to neighboring parts, and become inflamed and ulcerate. These enlarged glands are not always infected. They may be simply hypertrophied.

In this connection, it is of interest to put on record a

summary of the recent

Autopsy of the Emperor Frederick III.

The autopsy of the Emperor (Gaz. de Cologne.—Le Praticien, 16 July, 1888) was made by Virchow in the presence of Drs. Mackenzie, Howel, de Wegner, Bardsleben, Bergmann, Waldeyer, Braman and Langerhaus. Waldeyer un-

dertook the microscopical preparations. An examination was made only of those parts which were directly attacked -the neck, larynx and lungs. The other organs were not examined. There was found to be a complete destruction of the larvnx by the cancer, and a putrid bronchitis, the result of the inhalation of infectious substances. The larynx was completely destroyed by suppuration, and presented the aspect of a soft, flabby mass. There remained almost no traces of its cartilaginous structure. In place of the larvnx there was a large cavity. Perforation of the esophagus did not exist, as had been supposed during the last few days of his life. The choking which had troubled him was due to the affection of the larynx, this organ having lost its cartilaginous structure, which caused it to fall in upon itself, and thus allow the entrance of liquids into the lungs.

Dr. Mackenzie made, by the order of William II, a report, in which he said: "There is no doubt that the disease of the late Emperor was cancer of the larynx. * * * * The diagnosis was rendered difficult by the fact that the cartilages having been first attacked, the pathological processes developing in the deep layers of the cartilaginous tis-

sues, modified the symptomatology."

lodoform in the Treatment of Hæmoptysis.

Drs. Chauvin and Jorisenue (of Liege), in Le Progrès Médical of May 19, 1888, speaks very highly of the value of iodoform in the treatment of hamoptysis. For more than a year past they have abandoned the use of all other remedies, as iodoform gives an immediate result. Their conclusions are as follows:

Iodoform is an excellent hemostatic. Its action in relieving hemoptysis is certain and rapid—a very important point. Recurrence of hemorrhage is rare, and then only after a long time; and when it does recur, it is not as abundant as before in those cases in which observations have so far been made.

Small doses of the drug only are required.

No case of death by hemoptysis or return of hemoptysis has been observed during the ten months during which iodoform was used among the inhabitants of a very populous and poor district where very defective hygienic surroundings existed.

Iodoform succeeded in arresting hæmorrhages in cases in

which ergotine had failed.

Revulsives were used only in very grave cases, where it

was not considered right to expose the life of the patient

while experimenting with a new remedy.

While the iodoform was sometimes combined with tannin, it is undoubtedly the former which is the active agent. The quantity of tannin was too small to act with such rapidity.

The following are the formulæ used:

R. Iodoform.....gr. 3ths Ext. of gentian (or liquorice) q. s..one pill

M. S. Take 3 to 5 pills per day.

 \mathbb{R} . Iodoform.....gr. $\frac{3}{4}$ Tanningr. iss Some excipient, q. s..... for one pill M. S. 3 to 5 pills per diem.

Hylander's Test for Sugar.

R. Sub-nitrate of bismuth......3ss

Let stand twenty-four hours, and then filter through

glass-wool.

Put into a test-tube 160 minims of urine, and 16 minims of the solution, and heat. If sugar be present, there will

be a black precipitate.

This solution will keep more than a year, and will, says Notel, detect sugar in the proportion of 1 to 400.—Lyon Mêd., 18 March; Le Progrès Méd., 14 July.

Analyses, Selections, etc.

Sulfonal—A New Hypnotic.

This agent is coming so prominently forward in some of our exchanges that we condense from a number of them a

statement of the claims made for it.

Prof. Kast, of Freibourg, has recently discovered what he claims to be a safe hypnotic in "diethylsulfondimethylmethan," which expressive chemical name he has abbreviated to sulfonal. It is an oxidation product of mercaptan (than which chemists have not invented a more stinking agent) with acetone, but it possesses neither taste nor smell. It is extremely resisting to most chemical agents, so that it has as yet no characteristic test. G. Vulpius, however, states that if about equal parts of sulfonal and potassium cyanide are rubbed together and heated in a dry test-cylinder, the

glass rapidly fills with a thick mist, developing the unsupportable odor of mercaptan, and the presence of sulphur is simultaneously recognized. If the residue is suspended in hot water and tested with a little diluted solution of ferric chloride, the red color formed by potassium ferrocyanide with iron salts is at once produced. Herr Ritsert, however, as a non-poisonous agent, substitutes pyrogallic or gallic acid for potassium cyanide. He heats one or two decigrammes of sulfonal in a dry test tube until at about 280°C., the water-clear fused mass begins to give off bubbles of gas. Then add from .05 to .1 gramme of pyrogallic or gallic acid, which makes the clear liquid become brown, and evolve the characteristic mercaptan vapor.

Sulfonal, according to Scholvien, is soluble in 15 [?] parts of boiling water. [Lovegrove says it requires more than 20 parts, and crystallizes out on cooling, which crystals require more than 100 parts of water at ordinary temperature to redissolve]; in 500 parts of water at 15°C.; in 133 parts of ether at 15°C.; in 2 parts of boiling alcohol; in 65 parts of alcohol at 15°C.; and in 110 parts of 50 per cent. alcohol at 15°C. After recrystallization of commercial sulfonal three times from 50 per cent. alcohol, absolute alcohol, ether, chloroform and benzole, the melting point is uniformly at

125.5°C.

The dose for men is from thirty to forty-five grains or more; but in women from fifteen to thirty grains is usually enough. If combination with some form of dilute alcohol is objectionable, it is best given in capsule or wafer, or it can be mixed with compound tragacanth powder and water.

Dr. Rabbas, Physician to Insane Asylum in Marbourg, has used sulfonal over 220 times in 27 different cases of varied affections. As an hypnotic, he says (Berlin Klin. Wochen., No. XVII, 1888) it acts better then amylene hydrate and paraldehyde in larger doses than 30 or 45 grains. It is successful even in persons accustomed to narcotics. Chloral hydrate produces sleep more rapidly, but its effects are not so lasting as sulfonal. Prolonged employment does not necessitate an increase in the dose. Ordinarily sleep is produced in half an hour, though sometimes not for an hour or two; and usually lasts from six to eight hours, or even longer. It acts gradually, and produces sleep entirely similar to normal sleep. Larger doses of 60 grains, varying, at short intervals, with smaller doses of from 30 to 45 grains, produce no hurtful effects whatever; and even prolonged administration produces no hurtful effects whatever.

Appetite, digestion, temperature, respiration and heart-action are nowise affected. In only one questionable case were vomiting and diarrhœa possibly attributable to its use. Its freedom from action on the heart gives it a great advantage over chloral.

Dr. William Macvie, Physician to Bottle Maternity Hospital, Liverpool, says (London Med. Press and Cir., June 13,) in robust people generally, doses of from 30 to 45 grains produce a feeling of fatigue and languor, with a distinct loss of sensation to all outward impressions. A deep sleep comes on in about an hour, although sometimes longer delayed, and the sleep increases in intensity for several hours. In a series of 120 cases, the best results followed. About 30 were cases of "nervous" insomnia, as a result of some neurotic disturbance, brain affection, grey softening, etc. Insomnia due to acute affections, as fever, or to cardiac affection was relieved by it. In all these cases, sleep was produced in from half an hour to two hours at latest, and continued from five to eight hours—the patient on awaking expressing himself as quite refreshed, free from pain or any bad effects. Some cases, however, have a languid, heavy feeling for a few hours in the early part of the following day. Even well marked cases of gastric catarrh bore it nicely. Per contra, some patients experimented on showed no trace even of the presence of the drug, even in full dose. A big, strong, healthy laborer, who was going about the hospital after a surgical operation, experienced no effect from 45 grain dose.

Prof. Kast made 300 observations on 60 patients. Almost without exception, it produced tranquil sleep lasting from five to eight hours, the persons awaking feeling perfectly comfortable. There is no want of coordination of the limbs

in men after its use, as has been observed in dogs.

Dr. Julius Schwalbe concludes (Deut. Med. Wochen., June 21, 1888,) after an analysis of the effect of sulfonal in 50 observations, that it acts as a hypnotic in nervous sleeplessness with very acceptable rapidity. It is to be preferred to morphine and chloral in febrile diseases, and in all affections where weakness of the heart is feared. It should be employed especially in children. In insomnia resulting from direct organic disturbance, occurring in a disease of short duration, its action is more or less uncertain.

Dr. H. Rosin, of Breslau (Berlin Med. Wochen., June 18, 1888,) tried sulfonal on 82 (and more) patients. It invariably acts as a hypnotic, without a disturbing effect, even in

cases of cardiac derangement. He considers half drachm doses equal to about $\frac{1}{6}$ th or $\frac{1}{7}$ th grain morphine, but the latter was better when there was cough or pain. In simple insomnia, it is as certain as morphine or chloral, and can

be used in 45 to 60 grain doses.

Dr. C. Oestrèicher, of Berlin (same journal,) observed its effects in 50 patients with nervous diseases, beside some who were phthisical. In half drachm doses, it is a non injurious hypnotic—not affecting pulse, respiration nor kidney secretion. Sleep sets in more slowly than after the use of morphine or chloral, but lasts longer.

The Editors of Southern Practitioner (Aug., 1888,) have tried it in three cases of sleeplessness due to nerve exhaustion from mental overwork and worry with very satisfactory

results.

While any number of like reports point to the good effects of sulfonal as a hypnotic in functional sleeplessness. some have undertaken to do too much with it, and have not secured such good results. Thus Drs. James C. Wilson and R. Hutchinson state (Med. & Surg. Rep., June 9, 1888) that in a few cases of the severer forms of insomnia and maniacal excitement it disappointed them. They gave 25 grains to a healthy adult male upon retiring, but with no more effect than his accustomed normal peaceful sleep, and without after-effects. In four cases of insomnia from various mental troubles, it was given in doses of from 25 to 50 grains without appreciably affecting the insomnia. Mr. Ernest Lovegrove also failed (Brit. Med. Jour., May 26, 1888) to get good effects from it. In fact, for several hours after taking the drug with inappreciable hypnotic effect, there was extreme drowsiness the following day, with considerable cvanosis.

There is no disposition whatever on the part of patients to whom it has been repeatedly given to form the "habit"

of its use.

Vesical and Urethral Calculi (fifteen cases) Removed.

Dr. W. B. Rogers, of Memphis, Tenn., makes report (Daniel's Tex. Med. Jour., July, 1888) of 15 cases—12 vesical and 3 urethral. The 3 urethral calculi were of uric acid. The largest weight was 165 grains, and in a boy aged 6 years. Perineal section was done in this case, and in another case which died, and external urethrotomy in the other case. The 12 vesical calculi were as follows: 8 phosphatic, 4 uric acid. Largest was phosphatic, and weighed 550 grains. Two deaths.

Surgical Cases.—(I) Skull Fracture—Brain Matter Lost—Recovery. (II) Humerus Fractured and Dislocated—Recovery with False Joint.

Dr. W. Z. Hollidy, of Harlem, Ga., reports these cases (Atlanta Med. & Surg. Jour., Aug., 1888). Case I.—Negro, aged 40, April 11, struck on left temporo-parietal portion of the head with a stick. Stupor, slow, labored pulse and irregular respiration followed. At the point of injury, the bone is depressed, and in the wound are particles of brain substance. The stupor lasted through the night, though on morning of 12th, he was easily aroused, and took some milk. Both pupils slightly but evenly dilated. A button of depressed bone was elevated, and a number of small fragments removed, and "a considerable quantity" of brain substance—estimated at two tablespoonfuls—oozed away. Catgut ligatures to the bleeding vessels controlled the hæmorrhage. All irritating pieces were removed, and mercuric bichloride solution (1: 2000) dressing, with iodoform, applied. Ether was the anæsthetic used. In six hours a drainage-tube was inserted, and ten grains of quinine given. The next day he sat up in bed and talked. Temperature 100.4°. Give eight grains quinine every three hours. next day a quarter grain of morphine was administered hypodermically to relieve some pain, and a dose of Epsom salts given to open bowels. Continued milk diet. On April 20th, the dressing and drainage tube are removed, and the wound is nicely healed. Iodoform dressing reapplied. On April 27th, he was dismissed convalescent, with restoration of power in the muscles of expression on the side of the face opposite the wounded side. A cartilaginous mass fills the depression in the skull, and no bad effect has since resulted from the fractured skull with loss of brain substance. Case II.—Man, age 65, complaining of muscular rheumatism in left arm and shoulder; can move these parts only with great pain. Five years ago, while handling a stick of wood, he fractured and dislocated the head of the humerus. His arm was then much swollen and very painful, and the doctor to whom he went then gave him only a bottle of liniment with which to rub the painful parts. After several weeks he was able to do light work The whole aspect is that of a dislocated shoulder. The deltoid muscle is so much atrophied as to leave a depression where there should be rotundity. He can scarcely bring (or allow to be brought) the arm up in a vertical position. The head of the humerus is felt in the subscapular

fossa, separated from, and about an inch below its neck. A false joint is also found some three inches below the shoulder-joint proper. Thus we have an illustrative case of Nature's surgery for fractured and dislocated head of the humerus. The rheumatic condition improved under the use of soda salicylate. Afterwards, applications of the Faradic current to the shoulder soon gave him much better use of his arm.

Influence of Mercury on Bile Secretion

Is the subject of an unfinished paper by Dr. J. F. Grant, of Nashville, Tenn., in Southern Practitioner, August, 1888. He defends the position taken seven years ago—("for which I claim at least the credit of originality")—that mercury does not increase the solid constituents of the bile. And he now goes a step further and asserts "it does not increase the biliary secretion at all." [The views which Dr. Grant presents were common at least 21 years ago. We graduated in the day when calomel was denounced as a remedy for common use, and we entered upon practice with an idea that calomel was not a cholagogue and of course could not be used sensibly as such. It may be that all that our teachers then said, which is so well repeated by Dr. Grant, is true that calomel does not increase either the solid constituents of the bile, nor, in fact, increase the biliary secretion at all. But we will venture the assertion that Dr. Grant will not remain in active practice any longer than we did before noticing that those practitioners who use calomel properly in cases of so-called "biliousness" have better or at least quicker and more satisfactory results than he who refuses to prescribe calomel as a so-called cholagogue. The school which Dr. Grant represents may be absolutely correct both in fact and in theory—that calomel does not increase the excretion of bile. But the practical school of physicians is likewise correct (and he will come sooner or later to recognize it), in that the proper use of calomel more quickly and satisfactorily relieves "bilious headaches," "bilious diarrheas," "biliousness generally" as met in every day practice than any other one agent recommended up to the day of this publication. The trouble, therefore, does not lie in the facts asserted on either side of this long ago disputed and continuously agitated question; but in the ignorance as yet common to the profession which prevents the proper interpretation. Live and learn.—Editor.]

Typhoid Fever in Alabama—Treatment and Complications.

Dr. Frank Prince, of Bessemer, Ala., concludes his article (Atlanta Med. & Surg. Jour., Aug., 1888) with the statement that disease does not always originate from germs exterior to the system, nor are germs the sole cause of disease.

Among the complications, it does seem that if phlebitis attacks the first case of typhoid fever in a family, it will attack other cases. It begins with "chilly sensation" and want of leg action. Pain becomes severe; the leg enlarges, and in a few instances never returns to its natural size. In treatment, elevate the leg to an angle of about 45°, and apply mullein leaves steeped in hot vinegar, and wrap in hot flannel. Re-apply as often as the leaves cool off. Or you may first rub the leg with the following, and then apply the mullein:

R.	Oil origanum
,	Oil sassafras
	Hartshorn
	Spirits camphor āā 5j
	Chloroform

Tinct. red pepper.....āā ǯiss. Mix.

For parotid abscess, encourage suppuration, and open as

soon as possible.

Convulsions are rare, even in children, and seem to be due to excessive heat or fever. They do not recur when cold is applied to the head and continued until temperature is reduced.

Sluggish brain is relieved with returning health.

Ulceration of cornea, with temporary loss of vision, suppuration of internal ear, deafness, etc., are to be classed as temporary troubles, as also loss of hair, loss of toe-nails, shedding of

the skin, etc.

In treatment of typhoid fever, good, common sense is the prerequisite. Open the bowels if necessary, but this is very seldom required. Turpentine mixtures are good for gastritis, alternating every hour or so with one dose of carbolic acid. Keep the temperature below 104° with cold applications, or antipyrin if needed. Cold water is the best tonic we can use in typhoid fever. For days he has kept the feet and legs in a tin basin full of cold water, changed as often as it became warm, until the fever was relieved. For bloody discharges, he generally has good result from a pill of calomel, opium and sugar of lead, with turpentine. But when this does not succeed, he gets good from alternating the pill with dark pinus Canadensis—stopping the turpentine.

The best fever mixture to use all through the disease is a teaspoonful of citric acid, tablespoonful of bicarbonate of potash in a goblet of water. As soon as the effervescence is over, give a teaspoonful or tablespoonful as often as required. Milk (whiskey or brandy) punch, with egg, or eggnog, is to be the diet. Potassium iodide is also a good antipyretic. Of 53 cases of typhoid fever treated on these principles this season, only one died, and he had phthisis. He never lets opium produce its constitutional effect; but he has seen the bowels locked up for fifteen days without bad effect. When collause occurs that is not relieved by diffusible stimulants, he uses half grain of silver nitrate every two or four hours. In excessive bowel hæmorrhage, teaspoonful doses of fluid extract of ergot is good—alternated with opium and lead acetate. If much delirium, use potassium bromide or camphor water. Let no solid food of any kind be given. If buttermilk is preferred, it may be ussd. Use even milk or chicken-tea, or beef-tea with moderation as to any one dose. If perforation results, manifested by a fiery red tongue, etc., enjoin perfect rest in recumbent position; and give egg emulsion of turpentine, alternating with opium and sugar of lead or carbolic acid every two hours, and keep turpentine stupes on the abdomen.

External Use of Sulphur for Sciatica.

Dr. J. W. Cowden, of Rock Island, Ill., reports a case (Atlanta Med. & Surg. Jour., Aug., 1888) to confirm the value of the recent recommendation of the external application of sulphur for sciatic neuralgia. Irishman, weight 180 pounds, age 45, strong constitution, saloon keeper, had suffered greatly for two months from sciatica, and his condition had become pitiable indeed. He had to use half grain morphia with a 16th [?] grain atropia hypodermically three times a day to get even temporary relief. But the Doctor stopped this, and, instead, enveloped the limb in dry powdered (flowers of) sulphur. In less than two hours he was sweating profusely, sleeping soundly, and oblivious of all pain and suffering. He awoke long enough in the evening to take some nourishment, and then fell asleep again, and slept through the night—the perspiration continuing all the time. He awoke in the morning free from pain, able to turn in bed, and to extend the limb in all directions without complaint. He got up, and was surprised that he could walk about his room without suffering or pain. He was then put into a large washtub, thoroughly scrubbed with soap and water,

and again put to bed, and the sulphur was re-applied to the limb and sacral region. The next morning he was again bathed; the neuralgia had disappeared, and from that time, without further medication, his recovery was continuous, and, so far as the pain is concerned, is complete. For a few days after discontinuing the sulphur, he suffered from sleeplessness and nervous prostration. The breath, perspiration and urine, soon after the application of the sulphur, were impregnated with sulphuretted hydrogen. But the rapid absorption of the sulphur and its elimination by the emunctories, and the rapid relief of pain, would seem to point to a specific action of the remedy. Recently the same patient had a relapse, caused by sleeping in a draft between two windows. But the repetition of the sulphur treatment again cured him.

Cholera Infantum

Is the title of a paper by Dr. S. T. Lowry, of San Antonio, Tex. (Tex. Cour. Rec. Med., July, 1888). In many cases the trouble seems to begin in the brain and nervous system, and the intestinal disorder is secondary; but such is not really the case. Undoubtedly cholera infantum is primarily due to poisons received into the system through the gastrointestinal mucous membrane; and the difference in the intensity of the symptoms is due to a difference in the nature and virulence of the poison. The intensity and uniformity of the symptoms of cholera infantum point almost unerringly to some definite chemical poison as its cause, and not simply to putrefactive changes in the alimentary canal. Clean skin, bed, clothes, etc., with frequent ablutions, abundance of fresh air, etc., should be insisted on to keep infants well. Feed them at regular intervals, in suitable amounts, with mother's milk, or the milk of a healthy wet nurse. Woman's milk is better adapted to the wants and digestive powers of a child than cow's, or goat's, or ass's milk can be made. Besides, the method of its supply immediately from the breast, at the right temperature, and without the intervention of filthy bottles to allow of bacterial developments or putrefactive changes. When a suitable woman's milk cannot be obtained, he prefer's ass's, goat's or cow's milk in the order named, suitably prepared to the wants of the child according to age, etc. So much for prevention. Now as to treatment, when called to a developed case of cholera infantum. As yet a positive treatment is unknown. His practice is to stop all feeding for the time, and give a mild

purgative, preferably castor oil, to cleanse the alimentary canal of any remaining unabsorbed poison. After this, administer, in safe but oft-repeated doses, some reliable antiseptic solution, such as bichloride of mercury solution (1:10,000 or 20,000) in teaspoonful doses every half hour or oftener. Salicylate of soda, calomel, carbolic acid, etc., find favor with other physicians. In addition, begin feeding properly. As milk affords such favorable conditions for the culture of bacterial germs, do not use it for several days; but use in its place sterilized meat broths, with rice and barley water, until the disease is removed, and then return to healthy milk. He believes physiological chemists are on the right track, and will soon discover a suitable food for cholera infantum patients.

Puerperal Eclampsia—Two Cases—One Recovery; One Fatal. Dr. R. A. McCall, of Ennis, Tex., reports two cases (Tex.

Cour. Rec. Med., July, 1888):

Mrs. Primipara, age 20, about full term, had been constipated and had been edematous, with stupor, headache, etc., was found about 11 A. M. on her bed unconscious, unable to speak or swallow. An hour later the Doctor arrived and found her semi-conscious and semi-comatose, with stertorous breathing, and rapid, full pulse. He gave by mouth chloral hydrate Di with potassium bromide 5ss, and evacuated her loaded bowels and bladder. In half an hour she had another convulsion. Chloroform was administered until the convulsion was over, and then half grain morphia hypodermically. Convulsions recurred in about three-quarters of an hour. Repeated hypodermic of quarter grain morphia. An hour and a half later she had another convul-Repeated morphia hypodermically, and gave the chloral and the bromide again. At 6 P. M. slight convulsive movements were relieved by chloroform inhalations. About nine hours later no further convulsions had occurred, but labor set in. Morphia was repeated hypodermically, membranes were ruptured, and manual dilatation practiced with each pain. At 7 A. M. a 4½ pounds female child was delivered, but died an hour later. At 8 A. M. another female child was stillborn. The patient made a gradual recovery in twenty days-suddenly awaking on the third day and asking what was the matter with her, etc. A year later she had a natural labor—8½ pounds female baby without trouble.

Mrs Primipara also, age 30, plethoric and hysterical, had

28

complained for several days of intense headache, pains in loins, dizziness, vomiting, etc. Convulsions seized her suddenly at 11 A. M. Dr. Harris arrived at 1:30 P. M., and bled her and gave chloroform. At 2, Dr. McCall arrived, when the patient was having a hard convulsion. Gave at once half grain morphia hypodermically, and continued chloroform. At 3 P.M. began hypodermically with Norwood's tincture of veratrum viride, six drops, increasing to twelve drops at intervals of twenty minutes until it produced usual physiological effect. Still the convulsions recurred at intervals of about two hours. Bladder was catheterized, but repeated stimulating enemata failed to move her bowels. Calomel Di was then put well back on her tongue, and washed down with water as best she could swallow. After waiting some hours, stimulating enemata were vainly repeated. Then eight drops of croton oil were given by the mouth, and the dose repeated in four hours, but all to no effect. Labor pains began about 10 P. M. Membranes were ruptured, manual dilatation practiced, and as soon as os was sufficiently dilated (about 3 A. M.) applied forceps and delivered a 11 or 12 pounds still.born child. No laceration, but exhaustion was extreme, and she was somewhat asphyxiated. Slight convulsion at 6 A. M.—the first since 10 P. M. She remained thus exhausted and asphyxiated 24 hours longer and died.

Catarrhal Fever.

Dr. W. A. Morton, of Cottondale, Tex., describes this fever (Tex. Cour. Rec. Med., July, 1888). He first observed it in North Alabama (1872). He does not know how it got its name. He found the same fever when he moved to Texas (1880), where it is generally complicated with malaria. is a fever that will become complicated by any epidemic, although he has only once seen it complicate pneumonia. It is a continuous fever, of specific origin, occurring sometimes epidemically, selecting generally elevated and otherwise healthy localities. The epidemic last winter was severe. The fever was ushered in generally by epistaxis, raw, red tongue, usually moist, raw throat, inflammation of internal ear, vomiting, "pea-soup diarrhœa," affecting the larger intestine more than the smaller, with hæmorrhages from the bowels in several cases, which may cause perforation and death; kidneys and bladder generally involved; sometimes dysenteric symptoms were present. But as a rule in uncomplicated cases, the fever begins with feeling of weariness, muscular soreness, fever higher at night, with remissions about 7 or 8 A. M., to rise again in an hour or so, remit again in the afternoon, and rise again about dark. Lips red, breath offensive, Schneiderian membrane dry, dirty white pasty coat on tongue, with red tip and edges; throat and fauces congested, bronchial tubes dry, sibilant rales; anorexia, nausea, perhaps vomiting; stomach tender; bowels tender about umbilicus and tend to diarrhea—the discharges having a characteristic odor; urine scanty, high colored; bladder irritated. Fever reaches 102°-3° during the day, and 104°-5° at night. Then abdomen becomes tympanitic, and suppression of urine is often. Skin more frequently alternates between dryness and perspiration for a few minutes at a time. Usually a clammy sweat bathes the body during third or fourth week. About this time, or sooner, dry, hacking cough sets in Mind clear throughout. Children (who are more frequently affected than adults) generally pick their nose and lips or pull their hair. In some cases the disease yields to treatment in four or five days, while in others, with symptoms no worse, it will continue several weeks. Rarely the disease takes on a typhoid type, with dry, brown tongue, sordes on teeth, and fever becomes of a more regular form, with very little morning and evening remission. No treatment is satisfactory. Evacuate bowels. Give chlorate of potash and antipyretics to keep temperature down. Lukewarm sponging is useful. Continue bismuth, with pepsin and morphia if necessary. Use soda salicylate or carbolic acid as an internal antiseptic if the breath and bowel discharges are offensive. If the tongue is dry, give turpentine with a mineral acid, such as aromatic sulphuric. Nourish with liquid diet-peptonized milk, beef-tea, buttermilk, etc. Use eggnog, milk-punch or wine-whey when stimulants are needed. Quinine seems to aggravate the disease when it occurs on the hills, but was serviceable in the valleys. When it causes a remission at or before 6 A. M., instead of 8 or 9 o'clock, it seems to cut the disease short.

Be Careful in Making Diagnosis.

Dr. R. H. Taylor, of Griffin, Ga., relates (Atlanta Med. & Surg. Jour., Aug., 1888) a case which proved to be rectal fistula which the family physician, without even making an examination, pronounced to be piles. There were no hæmorrhoids in the case. It only required an examination to reveal the facts.

Psoas Abscess Opening into Ascending Colon-Recovery.

Dr. J. McF. Gaston, of Atlanta, Ga., reports the case he saw in consultation with Dr. W. S. Edwards, of Atlanta (South. Med. Rec., Aug., 1888). Man, æt. 32, had dull, heavy pain in and around stomach, with constipated bowels, coated tongue, and poor appetite. After the action of a saline cathartic, the seat of the pain changed so that he could not endure pressure on the left side of the abdomen, but the right side was unaffected. Two days later, after slight exercise, temperature rose temporarily to 104.5°, and the pain left the left side entirely, but developed on the right side, extending from the inguinal region around towards the right kidney—the most sensitive point being 5 or 6 inches to the right of that kidney, and the temperature steadily rose to 103.7°, and steadily increased. Dr. Gaston diagnosed inflammation involving the right lumbar region. Flaxseed poultices were kept up, and mercurial treatment was continued to combat the inflammatory tendencies. On the eighth day (June 29) acute psoas abscess was easily diagnosed. To lessen extent of suppuration, ounce doses every two hours of a solution of a drachm of chlorate of potash in a pint of infusion of serpentaria were given. apply every three hours the following: Mercurial and belladonna ointment, aā 3ss; iodine, gr. v, and iodide of potassium, 5ss.—Mix. Over this unguent apply every three hours a fresh poultice of flaxseed meal and hops. Diet nutritious. Castor-oil as required. July 1st. Patient could not rest on left side without pain in right lumbar and iliac regions. On sitting him up, a decided prominence developed immediately in front of right kidney, extending forward over crest of ilium, which was dull on percussion, and gave fluctuation on palpation. Pressure from the border of the sacrolumbalis around above the crest of the ilium to the iliac region revealed great tenderness. Treatment was continued as on June 29. On July 2, suffering comparatively relieved; prominence had disappeared, no evidence of fluctuation, and sensitiveness on pressure greatly less. Aspiration, about midway between the cartilage of the ribs and crest of the ilium, obliquely backwards, passed through a dense membrane into a cavity, without any discharge on drawing back the piston. The needle being withdrawn, a trocar was passed obliquely forward through the same opening in the skin, encountered a dense membrane before entering an open space admitting of the free movement of the trocar. but no discharge. But this space was evidently a pus cavity, the contents of which had been evacuated internally. That night the patient's feet and legs became cool, and he was nervous, for which camphor mixture, Hoffman's anodyne, and mustard to ankles, were prescribed. bowel evacuation next morning was musky, yellow-drab in color, and about half filled the ordinary size chamber-pot. A like quantity of the same colored fæcal discharge had been previously thrown out before the doctors arrived. Portions of this discharge were pus, thus confirming the opinion that the abscess had opened into the ascending colon, where it lies in contact with the quadratus lumborum and psoas muscles without the intervention of peritoneum. July 4, he sat up twice, writing letters. Quinine was given, and the serpentaria and potash continued. On July 6th the doctors discontinued attendance, and the patient made a good recovery.

Life and Death Rates of New Orleans, etc.

Dr. Stanford E. Chaillé, of New Orleans, makes a comparison (N. O. Med. & Surg. Jour., Aug., 1888) of the life and death rates of New Orleans and other cities, from tables given in Vol. XII, "United States Census of 1880." He shows that during the past fifty years, New Orleans' death rate has enormously improved, owing greatly to the decline of yellow fever epidemics. Still that city has an exceptionally high death rate, which is due chiefly to the excessive mortality of its disproportionate colored population. Death rate by diphtheria is much higher in most Northern cities than in New Orleans; deaths by consumption were relatively more in New Orleans than in any of fifty cities of the United States, except Charleston, Washington and Richmond; deaths by malarial fevers were more numerous in New Orleans and the Gulf cities than in any other, except Kansas City; and dysentery was more fatal in New Orleans than in many of the other cities, except Nashville, Patterson and Washington. Dr. Chaillé expresses the conviction that "New Orleans can be rendered as healthful a home as any other large city by rescuing the swamps in and around that city from the domain of malaria, mosquitoes and snakes, and converting them into healthy homes and gardens." Streets must be improved, drainage made perfect, and scavengering more efficient. Protracted heat and moisture are existing conditions that are necessarily constant, and these make it the more imperative that the removable causes of the diseases just named should be removed.

Among incidental lessons confirmed by some of the tables analyzed, is the fact that "in New Orleans, as everywhere else, the colored mortality exceeds the white, and the male mortality the female." But if the colored person lives until he is 35 years old, then his expectancy of life becomes just as great as, if not greater than, that of the white person. But the New Orleans mortality rate of the past has been greatly exaggerated over its usual annual percentage by the occurrence of epidemics of yellow fever and cholera, which have not been so severe in most of the cities where statistics are collected. For instance, from 1850 to 1859, inclusive. there were four severe epidemics of yellow fever, with 18,744 deaths therefrom, and cholera every year, with 6,426 deaths —in short, 25,170 deaths from epidemics. From 1860 to 1869, inclusive, there were 3,318 deaths from vellow fever, and 2,004 from cholera-5,322 from both. During the two succeeding years, there were 5,096 deaths from vellow fever alone. But for the eight years, 1880-7, inclusive, there were only nine deaths from yellow fever, although during 1883 and 1884, there were 1,558 deaths from smallpox. The population of New Orleans for 1887 is estimated at 242,750; in 1880, it was 216,090; 1870, 197,913. The paper, as a whole, is a very fair one, and is very valuable to health and mortuary statisticians.

Atmospheric Influences in Iritis.

Dr. Wm. C. Ayres, of New Orleans, says (N. O. Med. & Surg. Jour., Aug., 1888) he had been accustomed, while gaining ophthalmic experience in the Southern part of Germany and in New York, to see cases of iritis (unless "aborted") have a total duration of from four to six weeks, and then recover about the normal condition of the eyes. But on taking up special practice in New Orleans, he has seen conditions so markedly different that he is compelled to attribute this difference to the warm, moist climate of New Orleans. For instance, he has never seen a case of purulent iritis in New Orleans, nor a case of suppuration after an eve operation of any kind. In fact, after cataract he has never seen, in New Orleans, a real case of iritis, nor irido cyclitis, although he only bandages the eye for two or three days, and keeps the patient in bed for the same length of time. In private practice, Dr. Ayres' cures result, on an average, in 12.6 days; in Charity Hospital, under Dr. Bruns, in about 20 days. The grand average of time of treatment of all cases of iritis, as found in Louisiana, is about 19 days—private and hospital treatment combined. Cases of the same diseases occurring in climates like South Germany, New York city, etc., treated in the same way as in New Orleans, require from 32 to 40 days for like stages of cure. Simply the question of temperature differences between these sections will not account for the difference of prognosis in favor of New Orleans. But the relative humidity* of the atmosphere about New Orleans always remains about the same. That is to say, that, the year round, the atmosphere of Southern Louisiana contains from 70 to 80 per cent. of saturation with aqueous vapor. Dr. Ayres asks that the ophthalmologists throughout the country keep records of their cases; and suggests that if the view he gives of the cause of quicker cure of iritis, etc., in New Orleans than in Northern localities be found correct, then artificial means may be resorted to to establish a like relative humidity of the Northern hospitals, etc. The treatment he has pursued is the common treatment of atropia instillations, leeches when required, hot water, rest of eyes, mercuric bichloride according to circumstances, etc.

Changes in Spinal Cord in Traumatic Tetanus.—Oil of Tobacco Successful in One Case.

Dr. Bat Smith, of Wharton, Tex., reports four cases of traumatic tetanus (Daniel's Tex. Mcd. Jour., July, 1888). Post mortem in Case I, negro boy who had stuck a nail in left foot, which caused the fatal tetanus, revealed no lesion below the sacral plexus of nerves. Here, however, there was heavy congestion of the first, second, third, and communicating branch of the fourth anterior divisions of the sacral nerves and of the lumbo-sacral cord. An intense inflammation, almost amounting to disintegration of the nerve tissue, followed the roots of these nerves to the first lumbar vertebra, where the spinal cord terminates. Lymph had exuded over the whole of the dorsal and lumbar region, and the spinal cord itself from the first lumbar to eighth dorsal, had degenerated into a mass of pus, so that but little nerve tissue could be recognized in this pus under the microscope. The cord, from the fifth to the eighth dorsal, was dark red, with many points of bloody extravasation. This inflammation extended to the roots and ganglia of nerves throughout the cord. No characteristic change was detected in the

^{*} Relative humidity" of the atmosphere at any given temperature is the actual percentage of humidity present of what would be the point of saturation at that temperature.

walls of the blood vessels, except such as was common to the general disintegration of the cord. The spinal meninges were inflamed—lessening in degree as the medulla oblongata was approached. [A singular contradiction occurs in Dr. Smith's report as to the location of injury. In beginning the report, he says: "Three months before, he had stuck a nail in the sole of the *left* foot, wounding a branch of the internal plantar nerve." Later on, he says: "It will be remembered that this patient had been wounded in the right foot; consequently, as might have been expected, the lesions were more distinct in the right posterior horn and right posterior lateral columns of the white matter. Owing to the decussation of the sensory fibres [?], I. found that on the *left* side the anterior parts of the grey matter were more involved than the right."] There were exudations throughout the grey matter, and blood could be pressed out of the cord twelve hours after death. Brain showed no signs of inflammation or congestion. Case II.—Fatal tetanus in old negro woman due to compound fracture of bones of leg. No trace of lesion in the ascending nerves, but the changes in the sacral plexus and lumbo-sacral cord, as also in the spinal cord, were identical with those found in Case I. Brain not affected. Case III.—Fatal tetanus in mulatto girl due to splinter wounding branch of left internal plantar nerve. Results of post-mortem examination of the cord, etc., similar to those in two foregoing cases. No changes in the nerves themselves communicating from the wound to the spinal cord. Changes were more apparent in left posterior horn and left posterior lateral columns of white matter; and, owing to decussation of sensory fibres, anterior parts of grey matter on right side were more involved than on the left. Case II (under care of Dr. John H. Bowers, of Columbus, Tex.).-Mexican had skin and nail of thumb torn off by a lasso, leaving nothing but bone, which was immediately amputated. Tetanus developed in a couple of hours, and death resulted in a few hours more. No post-mortem; but surely this case was not dependent on the absorption of some poisonous matter, nor on the germ theory. Evidently the fatal spasms were dependent on the excitation of the grev matter of the cord, due to the irritation of the peripheral nerves.

All four of the above cases are related to combat the notion that tetanus is due to germ theory or to absorption of bacteria.

The Doctor says that to control the spasms of tetanus, he

has found the fluid extract or the oil of tobacco, hypodermically used, to answer the purpose when other remedies had failed. He mentions an illustrative case, in which he injected hypodermically four drops of fluid extract of tobacco, diluted with six drops of water, and besides gave by the mouth a pill containing a quarter of a drop of the oil of tobacco every four hours. The spasms in the old negro woman did not recur for thirty-six hours, when the hypodermic injection was repeated, and kept up for several days at the rate of one injection every twenty-four hours; the patient eventually recovered. He has frequently used this remedy with horses, with the happiest result in those cases where the tetanus had been brought on by over exertion, but he has had no opportunity to use this treatment in animals having traumatic tetanus.

Curious Ophthalmic Cases in Negroes.

The following two cases occurred in the service of Dr.

Bruns (N. O. Med. & Surg. Jour., Aug., 1888):

Mulatto, aged 16 months, general health good. Three or four days after birth, his right eye reddened, discharged freely, and remained so for four or five months. Both eyes are prominent, although apparently normal. But while the iris of the right eye is of the rich, seal-brown color common to his race, the iris of the left eye is of a bright, china-blue.

Mulatto woman, aged 35 years, a field-hand, does not know letters. Since the birth of her child, twenty years ago, she has not menstruated regularly. Her womb is enlarged, retroflexed, and bound down by inflammatory adhesions. She has never been able to see well at a distance. At eight feet R. E. can count fingers, and at five feet with L. E. On inspection, both eyes normal, and pupils respond well to light. Under atropia dilatation, ophthalmoscope shows total disappearance of the retinal pigmented epithelium, the choroidal circulation being perfectly visible. Each disc is surrounded by a narrow ring of choroidal atrophy. The refraction is not less than — 12D in the right, and — 10D in the left eye. A pair of — 10D improves vision. greatly. This case of a high degree of myopia in an unlettered mulatto field-hand proves that the use of the eves for near work cannot be the sole cause of myopia. This mulatto possibly had a myopic white ancestor, and thus in this case inherited her myopia. Near-sightedness is so rare among negro laborers that Dr. Bruns does not record a similar case in the Charity Service during the past five years, although hundreds of negroes are annually in the clinics.

Treatment of Whooping Cough.

Dr. Emory Lamphear, of Kansas City, Mo. (Daniel's Tex. Med. Jour., July, 1888), having failed to do good with germicides since Afanasieff demonstrated the "bacillus pertussis," and having but little, if any, better results with neurotics, except the bromides, in modifying the severity of the attack, and with no better results from the so-called "specifics," he has come to rely chiefly on the bromides and codeinæ and antipyrin. When difficult to give or retain the bromides, he prescribes for a child two years old:

R. Codeinæ sulphatis gr. j
Syr. scillæ comp. 5ij
Syr. tolutani 5vj
Syr. pruni Virginian 5i

M. S. Half to one teaspoonful every 2 or 3 hours. Chloral is excellent in many cases. But recently he has used antipyrin with the best results in controlling the severity of the paroxysms. For a child two years old he prescribes:

M. S. Teaspoonful every six hours.

Elixir of bromide of potassium may be given between each of these doses if required.

Vaginal Lithotomy.

Dr. Robert Craig, of Tioga, Tex., reports the case (Tex. Cour. Rec. Med., July, 1888). Patient an old lady. Stone too large for removal by urethra. Used Cleveland speculum for vaginal dilatation; a silver catheter for a guide, and bent a grooved director on which to extend his operation. Removed two stones, weighing over 200 grains. Adopted antiseptic treatment. Patient is now doing well.

Rapid Recovery from Tobacco Amblyopia.

In the service of Dr. Bruns, of Charity Hospital (N. O. Med. & Surg. Jour., Aug., 1888), a white boy, aged 13, was admitted, who had become a habitual tobacco user—especially cigarette smoking. He had complained of dizziness and unsteady gait for over a year. Eyes, on inspection, were natural, but on ophthalmoscopic examination the temporal halves of the discs were pale. Vision R. E.=20-xl; L. E. =20-l. He was positively forbidden the use of tobacco. Strychnia sulphate, gr 10th, was administered hypodermically only one time. In fifteen days recovery was perfect.

Erythema and Urticaria due to Quinine-Treatment.

Dr. Wm. Stadler, of Lexington, Tex., reports these cases

(Tex. Cour. Rec. Med., July, 1888):

Case I.—Young man took a tablespoonful [?] of quinine the day before for remittent fever. Erythema covered his body—"red from head to foot as a boiled lobster." Quinquinia (composed of quinia, quinidia, chinconidia, of each 15 per cent., chinoidine 30 per cent., and chinchonia 25 per cent.) was substituted for the quinia in the following form, with excellent effect:

R.	Quinquinia5ij
,	Tartaric acidgr. x
	Morphia sulphategr. ij
	Oil of cloves
	Glycerineāā gtt. x

Water, q. s. to make mass.

Mix.—Make twenty-four pills. S: One or two pills. In the person of the Doctor's wife, a small dose of quinia produced urticaria. Substituted fifteen grains of above pill

mass every six hours. Fever was relieved.

A few days later a German preacher had fever. Quinia produced intense urticaria. Three of the above quinquinia compound pills every six hours speedily controlled the fever, without irritating the skin, but did produce transient sick stomach.

Effect of Cocaine Injected on Brain.

Dr. A. M. Autrey, of Houston, Tex., writes to Daniel's Texas Medical Journal, July, 1888, that having had frequent occasions to use cocaine, he has noticed that in those cases in which the injection went immediately into the general circulation, dilatation of the pupil and some nervousness, though never amounting to convulsions, sometimes followed before he had time to finish making the injection.

Cascara Sagrada in Constipation.

Dr. C. W. Barrin thinks (Med. Herald, Aug., 1888) the disappointments in relieving constipation by cascara sagrada are due to the improper manner of using the drug. He overcomes the bad taste by giving pills of the solid extract, combined with nux vomica and belladonna—thus acting as a tonic peristaltic agent. In this combination, the dose of the drug, used just before retiring at night, is not usually more than a fourth of the dose required if given without such combination.

Significance of Parasitic Life in Disease.

Dr. W. C. Duke, of Memphis, Tenn., says (Memphis Med. Monthly, Aug. 1888) vegetable parasites have been found, and their forms, habits and mode of life demonstrated, in most, if not all, of the zymotic diseases, such as malarial fevers and hæmaturia, in typhoid fever, dysentery, diarrhea, dyspepsia, scarlet fever, smallpox, diphtheria, and measles. These parasites are not found in the human body when in health; hence their presence in the human blood and organs in the diseases referred to means something. A separate and distinct form is peculiar to each disease referred to. The amœboid forms disappear from the blood after a few doses of quinia. The crescentic forms diminish as health improves. Intravenous injection of malarial blood into a healthy person is followed by typical intermittent fever, with the appearance in the blood of the second person of the various forms of the specific organism. second class of pyrogenic agents, which are the products of bacteria, are not in themselves pathogenic. The third and important group of fever-producing micro-organisms is well established. A number of the infectious diseases have been proven to be dependent on their specific micro-organisms. Typhoid fever, for instance, is due to typho-toxin. A toxin has also been isolated in a crystalline form from an impure culture of the bacillus tetanus, called tetanin. Thus it is proven that bacteria in the blood have a special significance in disease.

Succus Alterans for Syphilis.

Dr. George Howe, of New Orleans, La., writes to the Medical Herald, Aug., 1888, that another year's use of "succus alterans" (for composition, etc., see page 1 of advertising department) finds him, if possible, a more enthusiastic advocate of its use in all stages of syphilis. He cites the remarkable case of a man who had had the disease for six years, and had been under the care of eminent practitioners, without material benefit—although they had successively mercurialized and iodized him. From small doses he had gradually increased iodide of potassium until for some time he had been taking 1200 grains a day—sometimes alone and sometimes in other usual antisyphilitic combinations. "Holding up" on treatment for a time did no good. Fumigations and baths had also been exhausted. Still he had nocturnal osteoscopic pains, nodes, etc. Dr. Howe began methodically with two-drachm doses of "succus alterans"

three times daily. For the painful nodes, he was to paint them with four per cent. solution of cocaine muriate, and a half hour later, to paint tincture of iodine over them. mediate relief followed, and it was not necessary to use this local treatment more than once during the night, except on one occasion-in all about ten nights. Five-grain doses of potassium iodide were given with each dose of the "succus alterans." After one month, the iodide was discontinued, and the "succus" alone was continued. In about six months the dose of this was reduced to one drachm, and the patient was "a new man." He was then advised to use larger doses of the succus alterans twice a day for a couple of months or so, and then gradually decrease and discontinue some months later. He was made well.

Progress in Ophthalmology.

In the report by Dr. J. Morrison Ray, of Louisville, Ky. (Amer. Prac. & News, July 21), he states that within the last few years the French School have been retrograding toward the operation for cataract extraction of Daviel, as advocated in 1747, which consisted in a large flap incision in the corneal margin with extrusion of the lens without removal of a portion of the iris. Von Graefe's modern operation, however, still holds its own with American ophthalmologists a smaller incision, linear in shape, thus lessening the danger of primary suppuration of the cornea, which requires the removal of a small portion of the iris, thus lessening the danger of protrusion. As to the after-treatment of cataract cases, the late Dr. Cornelius Agnew taught that light should not be excluded from the rooms of an ophthalmic hospital. He used a thin, dark shade over the eyes for a few days only. Others have gone so far as to exclude all bandages. Chisolm, for instance, uses only a piece of isinglass plaster. and places no restriction over the patient. There is much truth in Lawson's statement that the success in cataract depends on the operation, and not on the after-treatment. The tests of Dr. J. F. Weeks as to ophthalmic antiseptics prove that weak solutions of mercuric bichloride and silver nitrate are the best. Alt recommends for all forms of catarrhal or purulent conjunctivitis and trachoma a solution of the mercuric bichloride of from 1: 2500 to 1: 10,000. But Dr. Ray has seen 1: 5000 solution "produce considerable irritation of the eye." Dr. R. H. Derby has forcibly presented the importance of the subject contagious eye diseases. Dr. Ray has had to combat an outbreak of contagious eye

disease in an institution in Louisville, traceable to a case of granular lid admitted some months previous. In some, a catarrhal conjunctivitis occurred, while in others true trachoma developed. Crystals of copper sulphate were applied to the diseased surface, and the conjunctiva was flooded with a spray of mercuric bichloride—1: 5000. Why different conditions resulted from the same source of contagion is difficult to explain. Dr. Fox has reported a case in which he partially succeeded in replacing a dense leucoma by transplanting from the cornea of a rabbit. In stronger solution than 1: 1000, the new local anæsthetic, hydrochlorate of erythrophleine, is painful to the eye. The result of Dr. Ray's trials was not as successful as that from cocaine. Alarming symptoms were produced by its instillation for glaucoma by Theobald. Antipyrine is valuable in allaying the pain of iritis, corneal ulcers, and photophobia. Myotics relieve intra-ocular tension. Proper use of eserine in glaucoma has delayed, or altogether made, iridectomy unnecessary. Regular instillations of pilocarpine has freed glaucomatous symptoms.

Dilatation of Sphincter Ani—Its Prophylactic and Curative Virtues,

Is the title of a paper by Dr. J. G. Carpenter, of Stanford, Ky. (Amer. Prac & News, July 21), in which he advocates divulsion for stricture of sphincter ani, fissure, ulceration, hæmorrhoids; for removal of rectal neoplasms and foreign bodies, constipation, facal impaction; for exploration with fingers and hand to detect vesical and uterine diseases, dislocation of ovary, intra-pelvic and intra-abdominal growths; for reduction of impregnated and retroverted uterus; for successful closure of recto-urethral or recto-vaginal fistula from within the rectum; on account of acute prolapsus ani; for rest after operation for radical cure of chronic prolapsus ani; for ocular inspection and making applications to ulcers in sigmoid flexure; for irritable rectum due to chronic proctitis, to give rest to the bowel, as does an artificial opening in chronic cystitis; pruritus ani, when caused by irritable and hyperæsthetic nerves supplying the lower rectum and anus, and to accomplish bloodless nerve stretching.

How is divulsion done? When necessary, give salts or oil the day before operation, except in obstinate constipation or impaction. Wash out rectum with warm antiseptic wash. Patient should always be in recumbent posture, under an anæsthetic; it is a violent procedure. He should

lie on the back with thighs flexed on abdomen and abducted, or upon the side with thighs flexed. Lubricate both thumbs; insert one, then the other, with their dorsal surfaces in apposition their whole length, and stretch the anus directly to the right, then to the left, until the palmar aspect of each thumb is in contact with the inner surface of the tuber ischii. (Wyeth.) Repeat the stretching in the opposite direction at right angles to the first, then in other directions until the anus is gone around, then apply considerable pressure to sphincter muscles all around; pulling apart the anus with four fingers, on each side, and kneading the muscles thoroughly. The sphincters completely give way, and the muscles, previously hard, feel like well-beaten beefsteak, or even putty. This will occupy at least five or six minutes; scarcely more than a drop or two of blood is seen, but the anus is bruised, and for a few days extravasation is noticed, the part gradually undergoing the changes of color usually observed in any bruise. (Allingham.) In divulsion for rectal exploration and operations within the rectum, it is not necessary to do more than Wyeth states.

An antiseptic injection of half a gallon hot water should now be given, and morphine pro re nata, and antiseptic pad applied and held by a **T** bandage to prevent soiling. The rest obtained by paralysis allows the fissure, ulcer, hæmorrhoids, irritable rectum and pruritus ani to heal and sub-

.side.

Hæmorrhoids are cured by resting the paralyzed muscles, stretching and rupture of hæmorrhoidal veins, and massage to the affected tissues. Two or three days after operation, again syringe the rectum and anus with hot antiseptic injection, a pad, etc., applied, and the local treatment repeated in two or three days; if necessary, other local medication should be resorted to. Forty-eight or seventy hours after operation give mild purgative, and repeat as demanded. The divulsor or speculum is preferred by some operators, but the manual method is the most harmless.

In divulsion, we have, first, the operation upon the muscles themselves; second, nerve stretching of the branches of

the sacral and pudic nerves.

Treatment of Piles by Dilatation.—M. Verneuil cured ninetyeight cases of a hundred. Duration of treatment scarcely exceeds eight days, during four of which the patient remains in bed, and during remaining four days in his room. Piles of fourteen years' existence have been completely cured in this manner. Even in cases complicated with the rectal prolapse, dilatation should be had recourse to. During the fifteen years that the author has practiced this method he has not met with one unsuccessful result. He prefers the speculum to the digital method of dilatation.

Nephrectomy for Sarcoma.

Dr. W. O. Roberts, of Louisville, Ky., reports the case (Amer. Prac. & News, July 21) of a German girl, æt. 5, healthy until an attack of measles, March, 1887. After that, she had attacks of "dumb ague" and frequent abdominal pains. During attack of scarlatina, in September, 1887, Dr. Anderson detected a tumor larger than his fist just beneath the ribs in left abdominal region, which grew in size, downward, forward, and inward. General health did not fail until Spring, 1888. Through the thinned abdominal walls the tumor was then plainly outlined from the right of the median line to the under surface of the liver and below the crest of ilium. Its anterior surface was nodulated, with a sulcus transversely dividing the growth into two parts. Urine not unusual. It was diagnosed a tumor (cystic or solid) of spleen. Operation agreed upon. Incision through median line. Tumor was behind peritoneum, the empty descending colon resting on its anterior surface. growth was then found to be the left kidney, and not the spleen. It had pushed the small intestines deep into the pelvis, and produced enormous distension of the vessels of the meso-colon. Outer layer of meso-colon was divided with scissors, and hæmorrhage prevented by forceps. Trocar pushed into the tumor drew away very little strawcolored syrupy fluid On cutting into the interior of the growth, it consisted of a pulpy stuff. The incision was enlarged, the tumor freed of adhesions, and the artery and vein were silk ligatured. With clamp in front of ligature, pedicle was divided as a greater security against hæmorrhage. A second ligature was put around the vessels, and one on the ureter. After removal of kidney, and seeing that its fellow was healthy, the abdomen was closed. Up to seventh day the case progressed well. Most of the sutures were removed on fifth day. On seventh day, fever rose to 101.5°; dressing removed, and small abscesses were found at two of the suture punctures. These were opened; all other sutures removed, and the child left the hospital well in a few days afterwards.

Tumor weighed 15 pounds; length $6\frac{1}{2}$ inches, depth $5\frac{1}{2}$, thickness $4\frac{3}{4}$ inches. Contour lobulated oval; surface gen-

erally smooth. Kidney, doubled upon its concave border, was organically connected at left side of tumor. Renal capsule invested the tumor. Pulpy matter filled a cavity about size of fist in the centre of the tumor. Microscopically, the neoplasm is an encephaloid sarcoma. The kidney itself, except the portion contiguous to the growth (which was infiltrated with embryonic elements) was normal. Authorities generally advise against nephrectomy for sarcoma in children, on the ground that if the patient does not die as a result of the operation itself, the early recurrence of the disease and consequent death does not repay.

Hypodermatic "Normal Liquid Ergot."

Dr. G. V. Hale, of Wheatland, Tex., says (Tex. Cour. Rec. Med., July, 1888) that weak solutions of ergot are preferable for hypodermic use in fibro-myomata of the uterus. He specially recommends "normal liquid ergot" as prepared by Parke, Davis & Co., for country practitioners. [It is a reliable and an excellent preparation.—Ed.] He injects thirty minims at one dose in the abdominal parietes directly over the uterus, in cases of post-partum hæmorrhage, and he has "yet to cause the first nodule." On two occasions he has administered three injections in immediate succession into adjacent portions of the abdomen, with no bad effect save a slight soreness the next day. "Normal liquid ergot" requires no dilution with distilled water, nor filtering before using, as does a solution of ergotine.

China Grass as Antiseptic Dressing.

According to the London correspondent of the American Practitioner and News, July 21, this soft, silky and very absorbent fibre is being used in the London hospitals, etc., as a new antiseptic dressing. When treated, with 4 per cent. of salicylic acid, it proves an excellent antiseptic absorbent surgical dressing. Its chief value is the way in which it absorbs discharges from a wound. It is recommended to interpose some open-meshed gauze between the dressing and the wound, so as to prevent the China grass from sticking to the wound when removed.

The Address Before the Gibson County Medical Society,

By the President, Dr. A. M. Stephenson, urges its members to work hard for legislative protection in the shape of medical examining board, etc., as other States are adopting.

—Memphis Med. Monthly, Aug., 1888.

29

Dietetic Treatment of Summer Diarrhoea of Children.

Dr. I. N. Love, of St. Louis, Mo., thus epitomizes a paper on the above subject in the *Memphis Medical Monthly*, Aug., 1888:

1. In the dietetic treatment of summer diarrhæa of infants, the almost complete withdrawal of food temporarily

is sometimes desirable.

2. While a cow's milk diet in its purity, or properly modified, is in the majority of cases to be preferred as a substitute for a mother's or wet nurse's milk, there are frequently conditions where all forms of milk are to be withdrawn, and raw beef extracts or diluted albumen substituted, along with broths, beef-teas, etc.

3. As a temporary expedient, condensed milk is valuable,

but it is objectionable as a permanent food.

4. The addition of malted foods, containing the proper proportions of carbohydrates to diluted milk, is frequently most desirable.

5. Artificial digestion is a great advance in the direction of the solution of the problem of artificial feeding. If the digestive apparatus be in perfect condition, predigestion is uncalled for; but when it is crippled, its burdens may be very materially and happily lightened by the careful and judicious use of Fairchild's peptonizing ferments.

6. No stereotyped food which is applicable to all infants, no matter what the age or condition, has yet been devised,

and in the nature of things is not likely to be.

Insanity and Life Insurance.

Dr. B. W. Stone, of Hopkinsville, Ky., says (S. W. Med. Gaz., July, 1888) the diagnosis of insanity is sometimes impossible. If a person recognizes that a delusive impression is merely subjective, and does not enter the mind through the external organs of sensation, he cannot be said to be insane. But the existence of concealed delusions is a very serious hindrance to a successful investigation; a groundless suicide may be the first suggestion of the existence of insanity. The diagnosis of melancholia is generally more difficult than other forms of insanity. Suicide is presumptive evidence that insanity exists; and yet it cannot be denied that persons have suicided or attempted to suicide who gave no suspicion or symptom that even an insane impulse ever before possessed them. All the facts connected with the development of a case are to be taken into consideration in deciding upon any individual party's sanity or insanity.

What Cocaine to Use.

There are many brands of cocaine in the market, and many physicians have found to their annovance that some are inert and some very irritating when applied to a sensitive membrane. It may therefore be of service to physicians to learn the experience of Dr. Dudley S. Reynolds. Editor of *Progress*, who, in the July, 1888, number, expresses himself in this wise:

"The medical profession has about settled its estimate of the therapeutical value of muriate of cocaine, but it is, unhappily, no easy matter to 'decide upon the most uniformly reliable source of supply. The Editor of Progress had about concluded Merck's was the only reliable product, when recently he was induced to make a trial of that produced by Parke, Davis & Co. A fresh sample of ten grains was dissolved in five drachms of distilled water, to which was added one drop of liquid carbolic acid. One drop of this instilled into the eye of a man, from whose cornea a foreign body was to be removed, produced complete anæsthesia in three minutes, so that incision of the inflamed cornea, and turning out of the piece of offending metal, was not felt by the Twenty other similar experiments yielded similar results."

Fracture of Neck without Death.

According to the Cincinnati Medical News, July, 1888, "medical men in Medina, N. Y., and thereabout are interested in the case of Mrs. George Jackson, who survives with a broken neck, sustained by falling from a wagon. At last accounts, she was able to talk, and was perfectly rational. Her body below the shoulders was completely paralyzed. The doctors feared to attempt to make a complete examination or reduce the fracture, which is among the cervical vertebræ, lest it would snap the spinal cord."

Tincture of Veratrum Viride in Puerperal Convulsions.

Dr. Webb (P. O. not given) reported a case of peurperal convulsions occurring shortly after birth. Injected hypodermically twenty drops of tincture of veratrum viride, which brought the pulse down to 50 a minute, and induced vomiting. Alcoholic stimulants were given to hasten reaction. No more convulsions.

Dr. Garrett reported a case of violent puerperal convulsions, for which he gave veratrum viride [what preparation?] gtt. vij, and in fifteen minutes gave gtt. v per os. Reaction followed. Patient recovered.—Daniel's Tex. Med. Jour., July, 1888.

Jaborandi Antidotes Serpent's Venom.

Dr. H. C. Yarrow, Curator of Reptiles in the National Museum, says (Forest and Stream, May 10, 1888) fluid extract of jaborandi is an efficient antidote in mammals (but not in birds) to the bites or stings of venomous serpents. This is a suggestion that our country practitioners should remember at this season of the year.

Glycerine for Constipation.

Dr. Yoakum, of Mount Pleasant, Tex., reported to the East Line Medical Society (Daniel's Tex. Med. Jour., July, 1888) two cases of constipation relieved by rectal injections of glycerine.

Dr. O. S. Moore had used glycerine very successfully by the mouth for the same purpose—especially in children. His formula for a child one to one and a half year old is:

Book Botices.

Annual of the Universal Medical Sciences. Edited by CHARLES E. SAJOUS, M. D., Lecturer on Laryngology and Rhinology, in Jefferson Medical College, of Philadelphia, etc., and Seventy Associate Editors. Assisted by over Two Hundred Corresponding Editors, Collaborators and Correspondents. Illustrated with Chrome-Lithographs, Engravings, and Maps. 1888. Philadelphia and London; F. A. Davis, Publisher. In Five Octavo Volumes. Pp. of each about 550. (For sale by subscription only \$15 a year.)

These volumes are in the highest sense practical in their scope as in their detail. They form a complete report on the advances in each of the many special departments of medicine, etc., made during the year 1887. The perfection of the work will stand as a monument to the industry and ability of the Editor, and as a perpetual testimonial of the elegance and the rapidity of work that can be done by the publisher. The type adopted for the text is large and well shaped, and the paper and binding are durable and attrac-

tive. If there is a suggestion which might lead to the improvement of the issue of future editions or volumes, it would be to suggest that a synoptical table of contents be inserted on one or more fly-leaves of each volume. The small print used on the back of each volume to name the subjects in it, being colored with gilt, is difficult to read, and besides is easily defaced by handling, and thus soon becomes illegible.

The compilations and notes are well made in each chapter we have examined. The compilers, or Associates, are geographically distributed as follows: In Pennsylvania, 42; New York, 24; Illinois and Maryland, each, 4; Massachusetts, 3; Ohio, 2; and 1 each from the U.S. Navy, Minnesota, Wisconsin, Michigan, District of Columbia, Virginia,

and South Carolina.

While we have nothing but praise to give to the undertaking, and the manner of its execution, it has occurred to us that a cheaper issue of future editions would be more popular, and thus more serviceable to the profession. Whatever is simply to note annual advances is in the nature of a journal, and such annual publications are soon laid aside—too valuable, it may be, to destroy, and yet not wanted for reference beyond a year or two after purchase, because the advances noted are carried forward in standard monographs or cyclopædias. But of course if the publisher finds it profitable to issue the work in such fine style, then we would be the last to offer objection. Our intention is simply to offer a suggestion by which the "Annual" may become perpetual.

Of course it is impossible to review a work like this in the small space of a book notice. From the known ability of the Editors, the statements made by them have to be accepted as facts as they have seen them recorded in the numerous publications quoted. The volumes form something more than a mere epitome of records of advances. Each author has been more or less a reviewer of the records, thus

adding to the value of the publication.

Disorders of Menstruation. By EDWARD W. JENKS, M. D., LL. D., Professor of Gynecology, Michigan College Medicine and Surgery, etc. 1888. (Physicians' Leisure Library Series) George S. Davis, Datroit, Mich. 12mo. Pp. 120. Paper. Price 25 cents. (From Publisher)

Dr. Jenks treats the subjects altogether from a practitioner's standpoint, in the following order: Amenorrhæa, Menorrhægia and Metrorrhægia. Dysmenorrhæa, and Derangements of the Climateric. Questions relating to the physiology of the menstrual function are dismissed, with the statement that it was not the author's intention to discuss them. A great deal of the book is classical; but many original suggestions are well interspersed throughout the text. For the every-day practitioner, it is one of the publications "just out" that he should procure and carefully study or read in order to keep himself prepared to combat some condition which interrupts the healthy functional menstruai activity.

Diseases of the Male Urethra. By FESSENDEN N. OTIS, M. D., Clinical Professor of Genito-Urinary Diseases College of Physicians and Surgeons, New York, etc. 1888. George S. Davis, Detroit, Mich. 12mo. Pp. 86. Paper 25 cents; cloth 50 cents. (From Publisher.)

This volume completes the Second Series of the "Physicians' Leisure Library," which is issued in monthly numbers—\$2.50 a year in paper binding for the 12 volumes, or \$5 in cloth. A very important part of the little work before us consists in the consideration of many of the reflex troubles that result from diseases (especially stricture) or congenital conditions of the urethral canal. Many wandering though sharp pains in the scrotum, in the lumbar region and back generally, dyspepsias, disturbed nervous system, etc., are not properly diagnosed as to their causes simply because the urethra is not examined. Dr. Otis gives a very practical little work in sending this one out through the publisher.

The National Formulary of Unofficinal Prescriptions. First Issue. By Authority of the American Pharmaceutical Association. 1888. Cloth. 8vo. Pp. 176.

The American Pharmaceutical Association some two or three years ago appointed a Committee of one member from each State and two from Canada for the purpose of collecting such unofficinal formulæ as are frequently prescribed—exclusive of proprietary preparations—in various parts of the country, and systematize them into book form so that any educated pharmacist may prepare the medicines. Besides, this Committee was expected to present working formulæ for various pharmaceutical products that have been introduced since the last issue of the U.S. Pharmacopæia, etc. The work has been admirably well done, and the book, as now presented, becomes as essential to the pharmacists as

any supplemental edition of the U.S. Pharmacopæia could be. Although the book, as now published, contains 435 formulæ, it is not claimed by the Editing Committee that the volume quite supplies the want of the professions of medicine or pharmacy. Hence the Committee speak of this as the "First Issue," and indulge the reasonable hope that doctors and pharmacists will render their criticisms, and offer suggestions, either in the way of correction of errors that may possibly have crept in, or of improvements in the formulæ detailed, or in the way of elimination of worthless formulæ, or the addition of new ones. Mr. Charles Rice, of New York, N. Y., is Chairman of the Editing Committee, and Mr. P. W. Bedford, of New York, N. Y., is Secretary. As members of the General Committee by States in which this journal has its largest subscription circulation, and to any of whom letters of information or inquiry may be addressed, we note the following: Ala., P. C. Candinus, Mobile; Ark., J. E. Gibson, Little Rock; Dist. Columbia, H. E. Kalusowski, Washington; Ga., J. W. Rankin, Atlanta; Ky., C. L. Diehl, Louisville; La., A. K. Finlay, New Orleans; Md., C. Caspari, Jr., Baltimore; Miss., S. P. Head, Terry; Mo., J. M. Good, St. Louis; N. C., E. V. Zoeller, Tarboro; S. C., G. J. Luhn (deceased); Tenn., J. S. Robinson, Memphis; Tex., E. M. Wells, Fort Worth; Va., C. A. Santos, Norfolk; W. Va., C. Menkemeller, Wheeling. Or, if preferred, all such suggestions may be made direct to Prof. J. M. Maisch, of Philadelphia, Pa., Secretary of the American Pharmaceutical Association.

Abdominal Surgery. By HAL. C. WYMAN, M. S., M. D., Professor of Surgery and Operative Surgery, Michigan College of Medicine and Surgery, etc. Detroit: George S. Davis. 1888. Paper. 12mo. Pp. 87. Price 25, cents. (From Publisher.)

This is No. 1 of Series III, just begun, of the "Physicians" Leisure Library," which ought to be universally patronized by the American profession, both because of the merits of the works being published and the cheapness which puts it in the reach of all (25 cents a copy, or \$2.50 per set, in paper cover, or double these prices if bound in cloth). Very generally the republications are of the latest editions of standard works translated into English, or where the works are original, they are prepared by competent authors, and are both thoroughly practical in their teaching and fully up to the latest advance. The present little volume is made the more useful by beginning with the study of experiments

and observations upon the lower animals—dogs and rabbits—experiments which any country practitioner may make for himself. Each operation usual upon the abdomen is described in each step, so that the merest tyro may thoroughly understand it. This little book is a very excellent one. We wish very much the publisher had continued the habit of printing the title of the issue upon the back, so that the special work wanted, as it stands in the book-case, could be readily taken down without examining a half dozen or more publications of like size and having covers of like color.

Atlas of Venereal and Skin Diseases. With Original Text by PRINCE A. MORROW, A. M., M. D., Clinical Professor of Venereal Diseases, University of City of New York, etc. New York: William Wood & Co. 1888, Folio.

We have before us Nos. 5, 6 and 8 of this magnificent Atlas, but No. 7 has not yet been received. It will be remembered that this monthly publication comprises original illustrations and selections from the plates of Drs. Hutchinson, of London, Kaposi and Neumann, of Vienna, Fournier, Hardy, Ricord, Cullewier, Besnier, and Vidal, of Paris, Leloir, of Lille, Keves, Otis and Piffard, of New York, Hyde, of Chicago, and others. No. 5 gives elegant plates, colored as nearly as possible to nature, with descriptive text, of anular syphilide, chancre of lip with generalized pustular syphilide, large pustular syphilide, syphilis cutanea ulcerosa, rupial syphilide, different stages of pustulo-crustaceous syphilide. No. 6 contains plates and text of tubercular syphilide, serpiginous syphilide—tuberculo-ulcerous syphilide, ulcerative gummata, serpiginous ulcerous syphilide, syphilis cutanea ulcerosa et vegetans—ulcero-gummous syphilide. No. 8 begins the descriptive study of other dermatoses than those of "specific" causation. It gives plates of seborrhea, comedo, milium, sudamina, the eruptions of typhus and typhoid fevers, as also of the other exanthemata, variola, varicella, rubeola, rubella, scarlatina, and erysip-The text begins with an introductory chapter, describing the primary and secondary lesions of objective symptoms, and mentioning some of the subjective symptoms, as recognized by the patient himself. After these, the important principles of diagnoses of skin diseases are given, and then the classification of skin diseases used by the author. Succeeding chapters describe the several diseases, so far as

their cutaneous manifestations are concerned, named no the title-page of this Fasciculus, and which we have just enumerated. The remaining numbers of this Atlas will be of more importance to Southern practitioners than the former, because syphilis is so much rarer in the South than in the North.

Practical Electro-Therapeutics. By WILLIAM F. HUTCHINSON, M. D. Philadelphia: Records, McMullin & Co. 1888. 12mo. Pp. 247. Cloth. (From Publishers)

As a practical guide for the indications, uses and applications of electricity in medicine by the general practitioner this is an excellent work. It does not undertake to be a classical treatise, but it does admirably fill the part of simply telling when and how to use electro-therapeutics. We would be a little afraid to recommend it to the college student; nor would we speak of it as a text-book, but simply as serving the purpose of answering the questions of the physician who professes no special expertness in electrical subjects as to when to administer and the modes of using electricity in general practice. Numerous illustrative cases are reported under almost every disease considered, which reports are so full of details as to be descriptive in themselves of the proper manner of using, and of the effects to be expected. Technicalities are avoided as far as practicable. Of course the book presupposes that the reader has an elementary electrical education. However desirable it might be for every motor-man who runs an electric car along our streets to be familiar with all the known principles of the motor-power of electricity, etc., it is not essential that he should be thoroughly educated in order to run the car properly and safely. He knows how to handle the motors and what is the proper effect.

Ptomaines and Leucomaines, or the Putrefactive and Physiological Alkaloids. By VICTOR C. VAUGHAN, Ph. D., M. D., Professor of Hygiene and Physiological Chemistry, University of Michigan, etc., and FREDERICK G. NOVY, M. S., Instructor in Hygiene and Physiological Chemistry, University of Michigan, etc. Philadelphia; Lea Brothers & Co. 1888. Demi 8vo., pp. 216. (From Pub.ishers.)

This book is what has been wanted for some years by the profession. The subject of ptomaines and leucomaines, in so far as their disease-producing relations are concerned, has been under special study scarcely more than a decade; but

within that period facts have been discovered upon which theories of permanent standing have been built, until now the practitioner is far behind the day if he does not appreciate the importance of ptomaines at least. So far as we are aware, this work is the first attempt made to collect into book form the results of observers and experimenters on these micro-organisms, and to trace the relationship of cause and effect of these putrefactive alkaloids. We congratulate the authors upon their successful presentation of the current views on the subject in hand in such a manner as to make it easily comprehensible; while to the practitioner, after he has carefully read the book, it will serve also as a frequent reference-work, because of the technical information it gives.

Editorial.

Medical Society of Virginia.

The session of this State Society, to convene in Norfolk, Va., at 8 P. M., Tuesday, October 23d, 1888, will be a great success if but a half of the promises made by correspondents to the Secretary are fulfilled. The Norfolk doctors are earnestly at work doing all they can to provide for the pleasant entertainment of the guests, and the success of the session generally. The President of the Society, Dr. Benjamin Blackford, of Lynchburg, Va., is exerting all his energies to increase the membership and resources of the Society. The various reporters appointed to prepare papers, etc., are hard at work, and the other members are helping to build up the organization to its full proportions. The Executive Committee will issue the usual annual announcement about September 20th. There is one thing, however, that has impressed us, and that is that a great many correspondents write to the Secretary that they "expect to present a paper," etc., but do not make a definite promise to do so, nor authorize the announcement of a title, nor even a statement of a promise to have papers ready. It should be remembered by the Fellows that unless they notify the Secretary (Dr. Landon B. Edwards, Richmond, Va.) by September 15th at latest of their intention to have papers ready, and of the titles of the same, they cannot claim attention of the Society until the last day of session. Postal requests for such titles of papers, etc., were sent to every Fellow and Honorary Fellow of the Society about August 15th, and if any of these Fellows are negligent in responding, blame cannot be attached to the Executive Committee for failure to give the desired announcement in the circular to be issued about September 20th. We hope this notice will at once bring in many responses.

Confederate Medical Association.

15 Rue Caumartin, Paris, August 15, 1888.

To the Editar of the Virginia Medical Monthly,

Richmond, Va.:

DEAR SIR: The editorial note appended to my recent letter, in which it is mentioned that such an organization as I suggest was attempted in 1875, and that Dr. S. P. Moore, late Surgeon-General of the Confederacy, was placed at the head of it, prompts me to say that it was no disposition to ignore that gentleman which caused me to omit his name from the committee selected for the task of organizing a Confederate Medical Association.

My reason for this omission was based simply and exclusively upon the supposition that, in consequence of his advancing years, and long disconnection with the profession, it might not be agreeable or convenient for him to give his attention to the preliminary labor requisite for the success of the enterprise in question. I naturally supposed, however, that the first work of the Association itself would be to select him as its President, both as a recognition of his previous position as the head of the Medical Staff of the Confederate Army, and as a token of appreciation of the faithful and successful manner in which he devoted himself to its organization and management, for such, I am assured, is the universal estimate of his services after a dispassionate view of the situation.

As we have been called upon to mourn, since the publication of my letter, the death of a member of the Committee, our honored *confrère* and former comrade, Dr. A. Y. P. Garnett, I would respectfully propose as his substitute Dr. J. Herbert Claiborne, of Petersburg, Va., than whom no one who served the Confederacy is more esteemed by his colleagues or respected by the public at large.

From letters recently received, and other significant indications, I am convinced that the proposition which I have taken the liberty to make in regard to the organization of a Confederate Medical Association, meets with the approval of surviving Confederate Surgeons generally; and I earnestly solicit the gentlemen named for the Committee to take

the matter in hand, and to promptly and energetically bestir themselves in the accomplishment of this good, useful and patriotic work.

I am very truly and respectfully yours,

EDWARD WARREN-BEY, M. D., C. M., LL. D. We cheerfully surrender a part of our editorial space for the publication of the above letter from a gentleman of world-wide medical fame—an ex-Confederate Surgeon of eminence when at home, and a distinguished practitioner in his adopted home across the sea. The Editor, however, having served in the Artillery branch of the Confederate Service, has very little information as to the Medical Department of that Service, and hence cannot make himself known to the Confederate Surgeons as a class. The success of the Southern Surgical and Gynæcological Association, soon to meet in annual session in Birmingham, Ala., attests the fact that a Southern organization can profitably exist. But the suggestion of our Paris correspondent relates especially to the organization of the ex-Confederate Surgeons, so as to develop what is thus far the unwritten history of the Medical Department of the Confederacy. If the suggestion meets with the favor of any of the ex-Confederate Surgeons who may have read Dr. Warren-Bev's first letter on this subject (July No.), or who may read the above letter, it is to be hoped that steps will be at once taken to perfect the organization. It may be a short-lived Association, because of the annual death rate, etc., of those who were participants in that war; but if some of the unwritten records can be snatched from oblivion, it will prove serviceable historical material, and in many instances do good by suggesting methods which the necessities of the times demanded. -Editorial Note.

The Southern Surgical and Gynæcological Association

Will convene in Birmingham, Ala, at 10 A. M., Tuesday, September 11th, 1888, and adjourn Thursday. "Hotels and railroads will give reduced rates, but only those holding certificates, signed by the ticket agent at points where through ticket to place of meeting was purchased, will be entitled to the two-thirds reduction in return fare." The preliminary programme issued indicates a very wide spread interest in the meeting, and contains the addresses of some thirty or more prominent practitioners in different Southern States who have promised attendance and papers. Dr. W. D. Haggard, of Nashville, Tenn., is President; and the As-

sociation is greatly to be congratulated in having for its Secretary so energetic, watchful and judicious a man as Dr. Wm. E. B. Davis, of Birmingham, Ala., since upon the Secretary depends so much of the success of an organization of the kind. The Birmingham people and profession have made the most perfect arrangements for the entertainment of their guests on this occasion.

Dr. Thomas E. Stratton,

Recently the efficient President of the Richmond city Board of Health, has just been appointed by Surgeon-General U. S. Marine Hospital Service, Dr. J. B. Hamilton, Inspector of all trains from the South going into Washington city. He will board the trains at Alexandria, Va., and by examining the tickets find out all passengers coming from the fever-infected points intending to stop over in Washington. Such persons will be closely watched, and located by Health Officer Townshend of that city, at whose request the appointment was made. It is not intended to quarantine Washington, but to keep a lookout for refugees. Dr. Stratton was to have begun work on August 27th. He was a painstaking and efficient officer while President of the Richmond Board of Health.

London Lancet Not for Sale at \$400,000.

The owners have refused an offer of \$400,000 for all rights to the London Lancet. What medical journal can compare in monetary value to that? And yet it has not the reputation generally of "having the largest circulation of any medical journal published," as some of our provincial journals of two or three hundred subscription circulation claim for themselves.

Preparatory School for Medical Students.

We wish again to direct attention to the advertisement of this School, at Davidson College, N. C., Dr. Paul B. Barringer, Principal. It is a matter of regret that so many unprepared students enter as matriculates at our best medical colleges without a sufficient elementary preparation. This School is intended to prepare students for the graduation colleges, and as such it has, as it should have, the unqualified endorsation of the professors of those institutions who have recognized its benefit during the past two years. The classes are limited in size in order that Dr. Barringer and his associates may devote personal attention to the tuition

of each student. It is not necessary that such schools should be numerous, because many students have personal advantages of private tuition. But there are many in Virginia, North Carolina, South Carolina, etc., who are about to undertake the study of medicine who can nowhere else obtain such preparatory tuition as is afforded by this School. Medical students in North Carolina, Virginia, South Carolina, etc., would do well to attend Dr. Barringer's School.

Prescriptions of Opiates Not Duplicated in Indiana.

The recent Indiana Legislature enacted that "no pharmacist, druggist, apothecary or other person shall refill more than once prescriptions containing opium or morphine or preparations of either, in which the dose of opium shall exceed one-fourth grain, or morphine one-twentieth grain, except with the verbal or written order of a physician." Violation is classed as a misdemeanor, punishable by a fine of not less than \$10, nor more than \$25, for each offence.

Dr. Bernard Wolfe,

One of the graduates in the School of Medicine of the University of Virginia, July, 1888, and duly passed his examination before the Medical Examining Board of Virginia during its session in Roanoke, Va, in July, has been appointed Assistant Demonstrator of Anatomy in the Medical Corps of the University of Virginia, and will begin upon the discharge of his duties this Fall. We congratulate Dr. Wolfe upon the compliment thus bestowed on him, and at the same time feel that the University itself has made a good selection.

Dr. Morrell Mackenzie's Fees.

A correspondent in the New Orleans Medical and Surgical Journal says that "Sir Morrell Mackenzie has been receiving, since the Emperor's accession [to the throne] a fee of fifty guineas a day (\$200), and it is even said that this has recently been doubled."

Proportion of English Doctors.

In England in 1881, there were 15,022 doctors—1 to 1747 persons In 1886, there were 16,930 doctors, or 1 to 1662 persons. In London in 1886, there was 1 doctor to 939 persons.

The American Rhinological Association

Will hold its Sixth Annual Session in Cincinnati, Ohio, September 12th, 13th and 14th, 1888.

Dr. Grace Danforth,

Of Dallas, Tex., is perhaps the first young lady of Texas who has graduated in medicine and entered fully upon practice in that State. At the June meeting of the Dallas county Medical Association she was elected a member of that body.

Kentucky State Medical Society.

The Thirty-third Annual Session at Crab Orchard Springs, July 11th, 12th and 13th, proved to be a great success. Officers elect for the ensuing term: Drs. L. S. McMurtry, of Danville, *President*; Steele Bailey, of Stanford, *Permanent Secretary*; S. M. Letcher, of Richmond, *Assistant Secretary*; John G. Cecil, of Louisville, *Treasurer*. The next session is to be in Richmond, Ky., second Wednesday in May, 1889.

The Mississippi Valley Medical Association,

Is to meet this year at St. Louis, September 11th, 12th and 13th. The programme thus far arranged includes many papers and discussions of importance. The first day will be given to the discussion of abdominal surgery. The second, to infant feeding and some obstetric subject. The third day will be taken up with volunteer papers and some neurological subject. Arrangements for reduced rates are being made and the Association cordially invites all members of the profession to be present. For further information, address Dr. J. Lucius Gray, Permanent Secretary, 70 Monroe St., Chicago, Ill.

Qbituary Record.

Dr. Benjamin Franklin Cobb

Died at his home, in Richmond, Va., August 24, 1888. While in his buggy, near his house, on 23d, he was stricken by left hemiplegia as the result of apoplexy, and died next morning. He was born January 1st, 1826, in Wayne county, N. C. In 1845–6, he took his first course of medical lectures at the South Carolina Medical College, in Charleston, and his second course at Jefferson Medical College, of Philadelphia, from which institution he received his medical diploma, March, 1847. He settled in Duplin county, N. C. In April. 1862, he was commissioned Surgeon in the Confederate Army, and as such served through the war.

In 1871, he moved from Duplin county to Wilmington, N. C., where he engaged in general practice, devoting special attention to obstetrics and diseases of women. He held several official positions in the Medical Society of the College of Physicians and Surgeons of that city. About 1880 he moved to Hickory, N. C., and from that place he moved to Richmond, Va., in 1886, after having satisfactorily passed his examination before the Medical Examining Board of Virginia. Since then he has been in practice in this city, although his health had been declining for some months. He joined the Medical Society of Virginia in 1886, and was a member of the Richmond Medical and Surgical Society, which is now in vacation. He leaves a widow and a large family of children to mourn his unexpected death, while the circle of friends he had gathered about him during his short residence in this community, by his genial manners and by the estimate of his many good qualities of mind and heart, will feel that they have suffered a painful loss. As a personal friend and neighbor, we feel most keenly that the arrow of death has taken from us one for whom we had the highest esteem and affection.

Dr. John W. Bruffey.

As we go to press, we find the following correspondence from Roanoke, Va., in the Richmond Daily Whig of August

29th, 1888:

"The death, on Sunday morning, August 26th, of Dr. Bruffey, at the Roanoke Red Sulphur Springs, Va., has cast a gloom over this section of the State. The fact that he had been in ceble health for several months, and had failed to derive any permanent advantage from two months' stay in Baltimore under the care of medical specialists, in a measure prepared a few of his intimate friends for the worst, but to the general public the intelligence of his death was a rude and painful shock. His remains were brought to his residence, in Salem, and interred to-day with Masonic honors in the presence of a great crowd of people. Dr. Bruffey was nearly fifty years old, and was greatly beloved by all who knew him. He leaves a wife, but no children, to mourn his death."

Dr. Bruffey was not a Fellow of the Medical Society of Virginia, but was a prominent physician in his community.

Dr. Politzer,

Of Vienna, died in that city May 23d, 1888; age 74.

VIRGINIA MEDICAL MONTHLY.

VOLUME XV—No. 7.

WHOLE NUMBER, 175.

RICHMOND, OCTOBER, 1888.

Priginal Communications.

ART. I.—Operative Treatment in Cases of Enlarged Prostate.*

By HUNTER McGUIRE, M. D., LL. D., Ex-President and Honorary Fellow Medical Society of Virginia, etc., Richmond, Va.

It has fallen to my lot, in the last few years, to meet with a number of cases of hypertrophy of the prostate gland, which produced more or less obstruction to the passage of urine. It is an arbitrary, but convenient plan, to divide these cases into three classes:

1st. Cases where the obstruction was due to temporary congestion of an already enlarged gland, which yielded to the ordinary treatment, and did not return.

2nd. A class of cases where the obstruction to the passage of urine was permanent, but not great. Attention to the general health, the occasional introduction of the catheter, removal of the residual urine, and washing out of the bladder, were all that the cases required. These cases are, however, never free from danger; exposure to cold, imprudent eating or drinking, sexual indulgence; or without these causes, gradual enlargement of the gland may go on, and bring about the condition of the last, and

3rd class. In these cases the obstruction is great and

^{*}Read before the American Surgical Association, Sept. 19th, 1888.

fixed, micturition is frequent and difficult, perhaps impossible without the aid of the catheter. The introduction of this instrument grows more and more difficult; offensive residual urine is always present, and the general health suffers greatly. Cystitis, localized or general, is a painful and pronounced symptom. Violent tenesmus of the bladder, provoked by the obstruction, injures the vesical ends of the ureters, possibly a reflux of stale urine is driven into these canals, and ureteritis follows, then pyelitis and pyelonephrosis, from which the patient dies.

I think if we carefully examine cases, in either sex, of mechanical impediment to the passage of urine, when the obstacle is permanent and great, that we will find the pathological conditions, coming on after a longer or shorter time, in the order that I have mentioned, viz: cystitis, ureteritis, pyelitis and pyelonephrosis.

It is to the relief, by surgical interference, of this third and last class of patients that I propose briefly to call your attention.

I do not think it will be out of place to relate the circumstances which led me to resort to the measures I am about to describe. It has so happened that during the last eight months, four of the cases of stone in the male, which fell into my hands, required for their relief, the supra-pubic operation:—Two because of organic strictures, which made lithotrity difficult, if not impossible; one because of the large size and hardness of the two calculi the bladder contained; and the fourth because the stone was large and hard, and the patient too anæmic and feeble to bear the great shock and loss of blood which often follows section through the perineum.

In my first operation for stone by the supra-pubic method, I found when exploring the bladder with my finger through the wound, that the organ contracted with sufficient force to drive out every drop of liquid it contained; and while I used in this case drainage tubes both through the wound and the urethra, I took them away in a few hours, as they gave the patient a good deal of pain and annoyance. Since that case I have never used drainage tubes, except to keep

in the supra-pubic wound a soft gum catheter for two or three hours, to permit the wound to glaze before it was brought into contact with the urine which flows through it. I doubt, however, if even this is necessary. I have found in my cases that drainage through the wound above the pubis is as complete as drainage through the wound of lateral lithotomy, and that there is no more need for drainage tubes in the one case than in the other.

The mechanism of urination shows that the bladder is not an inactive bag, such as we might look for in a dead or completely paralized body, but that it is supplied with elastic and muscular forces for the retention and expulsion of urine. If we bear this in mind, we can explain the drain-

age that takes place after supra-pubic cystotomy.

In health there are two forces in operation, elasticity and muscular power, to retain and expel the urine. The elasticity of the walls of the bladder and pressure of the viscera around that body, are resisted by the strong elastic tissues surrounding the neck of the bladder. We see these elastic forces in operation when all muscular power is destroyed by injury to the spinal cord. When the distention reaches a certain point, the elasticity of the bladder overcomes the elastic resistance at the outlet of that body, and dribbling of urine takes place. In addition to these elastic forces, we have in the normal state two sets of muscles-one the "detrusor urinæ" muscle, and the other the "sphincter"—the first to expel, and the latter to retain the urine. The first is often aided by voluntary contraction of the diaphram and abdominal muscles, and the other by voluntary contraction of muscles in its vicinity. It is not difficult to understand then, that when a free opening is made in the anterior wall of the bladder, as in supra-pubic cystotomy, that the elastic force of the bladder walls, the detrusor urinæ muscle, assisted perhaps by the pressure of the surrounding viscera, will keep the bladder empty.

One of the four cases of supra-pubic cystotomy for stone, was that of a physician 65 years old, who while always rather nervous, pale and emaciated, was when he came to my private hospital, reduced almost to the last extremity

by constant suffering. For many years he had had stricture in the membranous part of the urethra, but he had kept the track open by the occasional introduction of a sound, using it often enough, he said, to keep the contraction from increasing. Two years ago he was conscious that some other obstacle to the passage of urine existed, and upon examination he found the prostate gland enlarged. Cystitis gradually came on, urination became more frequent and difficult, the urine was clouded with mucus and pus, the catheter was almost constantly used, and the free use of a solution of cocaine injected into the urethra was necessary to enable him to get the soft gum catheter into his bladder. Morphia was taken day and night to lessen his suffer-

ing.

I found a well organized stricture in the membranous part of his urethra. It admitted a No. 6 or 7 (Amer. Scale) steel sound. The prostate was found, by examination through the rectum, to be enlarged, but unequally so, the left side being much longer and larger than the right. I found the bladder contracted, its walls thickened and soft, and what had not been before suspected, a round oxalate of lime calculus, about three fourths of an inch in diameter. A chemical and microscopical examination showed an absence of renal disease. A few days after he entered the hospital I performed the high operation for stone. When I carried my finger through the abdominal wound into the bladder I found its walls thick and unvielding, the mucous coat soft and friable, the capacity of the viscus very small (capable of holding not more than three ounces of water) and the prostate gland curiously affected. The left side of the gland jutted into the bladder an inch and a half further than the right side; the middle lobe felt in size and shape like a woman's thimble, and almost completely closed the urethral track. The whole gland felt as hard as a mass of cartilage. My first intention was to remove the middle lobe of the gland, but the patient's condition was so feeble and alarming (for he did not take the anæsthetic well) that I desisted. I partially closed the abdominal wound, as I shall presently describe, introduced through the opening into the bladder a

No. 12 gum catheter, covered it over with absorbent cotton, and put him to bed. Three hours afterwards he complained so much of the drainage tube that I removed it. Twenty-four hours after the operation he said that he was free from pain and more comfortable than he had been for years. Repair of the wound was very slow, owing to his extreme debility, but it gradually closed until an opening large enough to to admit a No. 6 catheter was left. Then I determined, the patient consenting, not to let it close up, but endeavor to establish a permanent fistula there, through which he could make water. A soft gum catheter could easily be passed through the fistula.

I was satisfied that if my idea of the mechanism of urination was correct, that the patient ought to be able to retain and expel the water to some extent, and that in view of the condition of the prostate gland, the attempt was justifiable.

This fistulous track was two-and-a-half inches long; it extended from the bladder upward and forward like the spout of an ordinary coffee-pot. In its passive state it was closed by the pressure of the parts through which it passed; when the bladder got full enough to provoke the desire to pass water, and the organ was compressed, the fluid escaped through the passage most readily opened, that is, the fistulous track. I did not see why the fistula should leak, or dribbling of water occur, unless some voluntary effort was made to expel the urine from the bladder, or the urine was allowed to accumulate in the bladder to a point above the level of the top of the fistula.

Soon after this the patient returned home, and extracts from his letters will show you the result. A letter dated June 16th, 1888, says, in reply to a number of questions I asked: "I can retain the water from two to three hours during the day, and from three to five hours at night without dribbling, and in passing it off the last portion is frequently thrown out of the fistulous opening in weak jets." "I have voluntary power both to retain and expel the urine. The position of my body does not seem to have anything to do with the retention. I have my usual summer weight

and am almost entirely free from reflex pains." "I attend to all of my work, and am getting on right well, but cannot take a great deal of exercise." "When my bowels are moved sometimes there is sharp pain at the neck of the bladder, and apparently along the membranous part of the urethra." "The sexual desire and power are natural, but a seminal emission is painful, and followed by discomfort about the neck of the bladder." "The expulsive power is good. While bathing a few nights ago the desire to urinate came on, and the water was thrown from the fistula at least three feet from my body in a steady stream. If the fistula gets closed temporarily, the bladder will force the water very slowly and painfully through the urethra, and all the old local irritation will come back and last for hours after."

I wrote to him in July, saying, that as there was now no obstacle to his making water, I hoped that the parts about the neck of the bladder would return to their normal condition, and that after a time I might close the fistulous opening. He replied, "I would be afraid to dispense with it, (the fistula); I don't think the prostate has diminished in size."

A letter dated September 1st, says: "The operation that you performed is probably the only one that would have saved my life, and I now regard the fistulous opening as indispensable to prolong it, until the size of the prostate can be reduced. If it could be, I think the fistula might be closed, and I would soon be almost well."

Mr. James F., aged 69 years, has suffered for ten or twelve years with some obstruction to the passage of urine. Except for this condition of his bladder, his health has been good. He is a single man, and a farmer by vocation. In 1881, Dr. Brinton cut him (lateral lithotomy) for stone in the bladder, and removed more than fifty small calculi. From the patient's description these calculi were phosphatic. He obtained some relief from the operation, but it was only partial, and in 1882 his trouble was as great as ever. He consulted me in 1883, when I found his prostate greatly enlarged, and cystitis with residual urine to the amount of three or four ounces. I gave him a soft gum catheter,

showed him how to use it, and how to keep his bladder clean by washing it out. He came back to see me every year, sometimes two or three times a year, consulting other surgeons in the mean time, and each time it could be seen that the obstruction was slowly increasing. In 1885, he could pass no water without the aid of the catheter. The early part of 1886 he began to have some trouble in passing the catheter, and he stayed in my hospital three months, during which time I tried to reduce the size of the prostate by electrolysis, but failed to do any positive good.

In 1887, I repeated the attempt at electrolysis for several months, without decided improvement. In the summer of 1888 he came again, saying, that the difficulty of introducing the catheter was becoming so great that he was afraid to stay at home, for fear of an attack of retention that could not be relieved in the country. Indeed he had had several attacks which had nearly proved fatal. He spent now half of the night using the catheter, and was often one or two hours trying to introduce it. His sufferings were terrible, and his condition pitiable; several times he had been on the

eve of killing himself.

I operated on him July 4th, 1888. No shock followed. Twelve hours after the operation he said he was more comfortable than he had been for ten years. A drainage tube was used for a few hours. In three weeks the opening was so small that I was able only to introduce a No. 6 or 7 bougie. He left his bed on the twentieth day. He came to see me September 1st. He had fattened fifteen pounds, and could walk several miles without trouble; before the operation he could not walk alone fifty yards. He says that he is absolutely free from pain or trouble of any kind. He goes to bed at 9:30 P. M., and sleeps till two, or half-past two, when he is compelled to get up and empty his bladder: he then sleeps until five or six o'clock without being disturbed again. This has been the rule since he left the hospital; on some occasions he has retained his water six hours. During the day he goes from two to four hours without passing his water. He never has any desire to make water, no matter how full the bladder, and he is compelled to

empty the organ at stated intervals. If he forgets, and permits the water to accumulate in the bladder until it gets above the level of the top of the fistula, then dribbling of the urine through the fistula takes place.

It never leaks at any other time, no matter what the position of the body. Possibly the fact that this gentleman has not made water except with the aid of the catheter for nearly three years, may explain the absence of that sensation which informs the individual that the bladder should be relieved of its contents. He thinks that lately some slight sensation of this kind is coming back, and he has had occasional intimations warning him to empty the organ before the dribbling takes place.

He passes the urine in a steady stream, is thrown several feet from his body, and the last of it comes in jets. The urine now is natural; free from the mucus, pus and blood it once contained in such abundance. For five weeks after going home he introduced no instrument through the fistula. One morning when he arose he found the canal closed by a clot of mucus, and he could make no water. straining to get the clot out, some water passed through the urethra, the first escape of urine in this way for three years. He now uses about once a week a No. 7 soft gum bougie to keep the canal open. Lately he has had erections of the penis, and slight sexual desire; for ten years this feeling had been entirely absent.

The following is the mode of procedure which I have adopted: The night before the operation is to be performed, a purgative should be given, and if this does not act well, the next morning an enema employed to thoroughly empty the lower bowel. The parts about the pubes should also be shaved and well scrubbed with soap and water. Early in the morning of the day of operation a pill of five grains of quinine should be taken, and repeated every two hours until 15 or 20 grains have been administered, and slight cinchonism produced. After the anæsthetic has been given, and the patient placed upon the table, the parts should again be washed with green soap and hot water, a stiff brush being employed to make the cleansing thorough. Afterwards the parts should be bathed with a solution of bichloride of mercury 1-2000.

The only instruments likely to be required are a scapel, tenaculum and pair of small forceps. These should be placed in a tray containing carbolic acid and hot water 1-40.

The next step is to clean the bladder by washing it out with a weak solution of carbolic acid and hot water. A single soft gum catheter (a double canula catheter would be better) is introduced and the bladder washed until the fluid returns free from all sediment. In this way the wound about to be made is kept from coming into contact with the fœtid, alkaline urine, mucus and pus which the bladder often contains. Before removing the catheter let all the fluid escape. An empty gum bag which holds about 12 ounces of water should now be well oiled, folded upon itself, and introduced into the rectum above the internal sphincter muscle. A skillful assistant should perform this office and save the operator loss of time in cleansing and disinfecting his fingers.

After the bag has been introduced, inject into it about twelve ounces of warm water. This should be done slowly and gently, and the use of much force avoided. The bag, when filled, pushes the bladder out of the pelvis and above the brim of the pubes. If properly done, it lessens the danger and difficulty of the operation. The next step is to fill the bladder with a weak solution of carbolic acid and hot water; probably it will hold six or eight ounces. The use of force should be even more carefully avoided here than in filling the rectal bag. If the capacity of the viscus has been diminished by disease, any attempt to enlarge it by forcible dilatation is unjustifiable. As soon as the bladder is seen or felt above the pubes, the injection should cease. In some experiments made upon subjects with contracted bladders, I found, when the rectal bag was well filled, that the bladder became prominent above the pubes when only two or three ounces of fluid were used. A catheter may be emploved to inject the bladder, but I prefer simply to introduce the small nozzle of a Davidson's syringe into the urethra, say one and one-half inches, bend the penis slightly back towards the anterior abdominal wall, making thus a single gentle curve of the urethra, and send the water through this curve from the syringe into the bladder. As soon as any resistance is felt, the injection should be stopped, or as soon as the bladder can be seen or felt like a round ball above the pelvic brim, the injection should cease, even if there is little or no resistance. The penis should now be tied near its base with a piece of rubber tubing, or with the gum catheter, to prevent the escape of water, or an assistant may grasp the organ and hold it down between the patient's

thighs, out of the way of the operator.

Beginning now with the knife, three or four inches above the upper border of the symphysis pubes, varying the length according to the amount of fat and thickness of the abdominal wall, a vertical incision should be made down to the pubic bone. This cut should pass through the skin, fat and cellular tissue down to the linea alba. The linea alba should now be divided, the incision through this structure being from a half to three-fourths of an inch shorter than the one through the skin, but it should be carried down to the pubic bone, and the shortening be made at the expense of the upper end of the wound. Now with the handle of the knife separate the recti muscles, and any other tissues until the fascia transversalis is reached. There is no necessity for dividing any portion of the attachment of the recti muscles to the pubic bone. Make the dissection vertical, and carefully keep in the median line. The transversalis fascia should now be caught with the forceps, nicked, and divided with the point of the knife; if the operator prefers, he can divide this fascia upon a groved director. The cut through this structure should not be over two inches long, but division should be made down to the pubic bone. Again, with the handle of the knife divide the fat and cellular tissue under the fascia transversalis, lying between it and the wall of the bladder. Be careful not to disturb this loose cellular structure any further than is absolutely necessary. Careless or rough manipulation here may lead afterwards to urinary infiltration. The loose connective tissue,

just behind the pubes, should especially be left undisturbed. In this space between the transversalis fascia and the bladder, sometimes, but not always, may be seen large and engorged veins. They, of course, should be avoided if present, but if cut, will cease to bleed when the bladder is emptied and the rectal bag removed. When the bladder is exposed, the tenaculum is passed through its walls, the viscus pulled a little forward and opened with the scapel. The water will be seen to escape by the side of the tenaculum and knife. In these old cases of prostatic enlargement, the bladder walls are thick and tough, and cannot be stretched with the finger, as can be the bladder of younger subjects, upon whom the high operation for stone is made. So when the knife has entered the bladder, as it is withdrawn, cut in the median line an opening large enough to admit the index finger of the left hand. Let the finger follow the knife quickly, so that it may enter the bladder and thoroughly explore it before all the water has escaped, and do not withdraw the tenaculum until the finger is fairly in the bladder. Make the opening in the wall of the bladder as low down as can be safely done. Let it be opposite the upper border of the pubes, and not higher.

Sutures of silk may now be used to lessen the size of the opening in the skin and superficial fascia. The stitches should go down to, but not include any portion of the recti muscles. The opening left in the skin should be as large as, but not opposite to the opening made in the bladder. The opening in the skin should be near the upper end of the incision; as the opening in the bladder is as low down as it can safely be made, the fistula which we are endeavoring to establish, will thus be two and one-half to three and one-half inches long. One stitch at the upper and two at the lower part of the wound will accomplish this. The operator should now introduce a No. 10 or 12 soft gum catheter into the bladder through the abdominal wound, and let the distal end drop into a cup placed at the side of the patient.

. If the catheter gives rise to vesical tenesmus, or is the source of any annoyance to the patient, it may at once be

removed; otherwise it will be better to let it remain some hours, for the sake of cleanliness, and to give the wound time to glaze. The wound is now simply covered with absorbent cotton, which should be changed as often as it becomes soiled. The patient can lie in any position he prefers, or change his position as often as he desires. The drainage of the bladder is complete with or without the tube, no matter what the position. In the high operations for stone which I have done, and in the operations for the relief of enlarged prostate, the loss of blood has not exceeded two drachms. The shock of injury has been trifling, or none at all. In none of my cases have I encountered the peritoneum.

During the after treatment, I keep the wound constantly covered with cotton wool, and endeavor to keep the urine acid. It is tested by the nurse with litmus paper several times a day, and if it has any tendency to become alkaline, some acid drink (citric acid in the form of lemonade is preferred) is freely given. As long as the urine is acid the wound is healthy and healing, for acid urine is aseptic. Indeed, this is the only way that I have ever been able to treat the wound of epicystotomy antiseptically.

One of the most important things to do in preparing the patient for the operation is to make the urine acid. It is well to remember, in endeavoring to do this, that the urine may be acid when it comes from the kidneys into the bladder, and by decomposition, soon become alkaline there. This can readily be determined with the catheter. It is sufficient for our purposes if the urine from the kidneys is acid.

ART. II.—Note on the Use of Salol in the Treatment of Dysentery and Diarrhœa. By WILLIAM PERRIN NICOLSON, M. D., Professor of Anatomy Southern Medical College, Atlanta, Ga.

All physicians who have attempted to treat diseases of the intestinal canal upon the principles of antisepsis have realized the great uncertainty with which antiseptic agents act. Most substances belonging to this class of remedies are dependent upon their solubility for the manifestations

of their effects; others when introduced into the stomach are partially, and perhaps wholly, absorbed into the circulation; or, when given in quantities sufficient to overcome this difficulty, they exert a toxic effect upon the system. Thus the exhibition of remedies for intestinal antisepsis has been one of the most uncertain and most unreliable of therapeutic methods.

The introduction of salol marked a most important era in the treatment of this class of diseases. Though a few published reports of the character and uses of this remedy have appeared, I am sure the profession generally has not

appreciated its great value.

Salol is chemically a salicylate of phenal—a combination of salicylic and carbolic acids—insoluble in water, and also in the acid reaction of the gastric fluids. It has been demonstrated that it passes unchanged through the stomach, to be decomposed in the alkaline juices of the intestinal canal into its original constituent parts, free salicylic and carbolic acids—62 per cent. of the former and 38 per cent. of the latter. It is this fact that renders it the ideal intestinal antiseptic, especially as it can be administered in comparatively large amounts without producing the poisonous effects of either of those constituent substances.

In almost all cases it produces the smoky urine of carbolic acid, though I have seen no report of any poisonous effect, when kept within a total of two drachms during the twenty-four hours. Its insolubility in the stomach causes only a limited amount to get into the circulation at a time.

My attention having been drawn to its value as an intestinal antiseptic, I have had ample opportunities for testing its merit in the treatment of all bowel troubles where antiseptics are indicated. Since I began its use in acute dysentery, I have almost without exception, not found the resort to any form of opium necessary. Given in five-grain doses every hour, the griping and straining rapidly disappear, and the patient, without the production of any constitutional effect, is rapidly restored to a state of comfort and quiet.

Numerous cases could be cited, but would only consume unnecessary space. I would simply say that in all cases the result has been prompt, the disease yielding after the exhibition of a few hourly doses, after which the remedy has been continued every three hours as required. Within twenty-four hours many have been entirely relieved where the disease was seen in its early stages.

Following these results, I have repeatedly employed the remedy in simple diarrhea and acute indigestion, and also in the summer diarrhea of children, and always with the same uniformly happy effects. Its insolubility in the stomach renders it unirritative, and hence it is almost always well retained. In the diarrhea accompanying continued fevers of the typhoid type, I have found it very useful, and its antipyretic effect, in combination with other remedies for that purpose, render it doubly useful.

The uniformly good results obtained in my own work, as well as my knowledge of its satisfactory character in the hands of others, leads me to draw the attention of the profession more especially to it. Combining as it does cheapness, harmlessness in moderate doses; its unirritating effect upon the mucous membrane of the stomach; together with its antiseptic and sedative effect upon the intestinal membrane, I believe it to be a remedy of great value.

Regarding its many other applications, especially in rheumatism, I have nothing to say in this article. Those uses are familiar to most of the profession. Should it give others the same amount of satisfaction that I have derived from its employment, my object in presenting this note will have

been obtained.

As found in the market it can be administered in fivegrain capsules, or in the gelatin coated pills kept by the trade.

"The Kimball."

Tongaline.—Have been using Tongaline for two or three years with the most happy results, and find it has excelled any other remedy for the cure of muscular rheumatism.

J. M. Jones, M. D., Newport, Ark.

ART. III.—Value of the Hypophosphites in the Treatment of Phthisis Pulmonalis, Tuberculosis, Scrofula, Chronic Bronchitis, Neurasthenia, Anæmia, General Debility, Marasmus, and ail Wasting Diseases. By a Fellow of the Medical Society OF Virginia.

Phthisis (tuberculosis) is a constitutional disease, in which tissue-nutrition is seriously impaired or arrested. The processes of assimilation and nutrition are first involved and interfered with; hence there is a slow and gradual, vet progressive, wasting of the fleshy parts of the body, which generally results in great emaciation, so characteristic of this disease. There is also a tendency, from defective tissue nutrition, to the formation of a lowly tissue growth—a growth or development of tissue below normal or healthy tissue. In the lungs this proliferation of lowly connective tissue-corpuscles produces a lymphoid mass, which does not develop into higher tissue, and there is a tendency to molecular death by necrosis; softening commences, and generally ends in suppuration. If this softening process goes on in the lungs. leading to ulceration and suppuration, then we have expectoration of purulent matter, indicative of a corresponding destruction of lung tissue, with the formation of a cavity. During this period of softening and ulceration, and breaking down of the tubercular mass, there is great constitutional disturbance, as shown by the irritative cough, varying temperature (the evening exacerbation being very decided and profound), impairment of appetite, loss of strength, irritable temper, gradual emaciation, and hectic flush or fever. This is indeed a critical period. Invigorating tonics and nutritious food are imperatively called for, with healthful, moderate daily out-door exercise, in a pure, dry air, and (in cold weather), light yet warm clothing.

Now, the cardinal point—the *important matter*—to be kept in mind is the improvement of the tissue nutrition. If the tubercular mass or masses soften, break down, and are expectorated in the form of purulent matter, then the general system gradually fails; or if in the formation of these abscesses and cavities, a large blood-vessel should be opened, then a sudden and excessive hæmorrhage may rapidly precipitate

and hasten the end. But if the appetite can be improved. if the digestion and assimilation are promoted, if the tissue nutrition can by any means be raised, then the neoplasm may be saved from a degenerate and downward course of destruction and death. If we can improve the neighboring lung tissue, we may at least be able to set up a barrier around the tubercular mass. Little influence can be exercised or exerted directly on the tubercles themselves, as they possess no vascular system, although absorption of their orcanic elements is claimed by some to be a demonstrated fact. By a general improvement in the nutrition of the tissues of the body, the danger of the molecular death of the new formation or growth is more certainly limited. must ever keep in mind the lowered tissue nutrition, and avail ourselves of all the means at our command of raising it.

Now alimentation is essential, and must be secured if possible. Without appetite, sufficient food cannot be taken. The properly combined hypophosphites have long been recognized as valuable agents in supplying what is lacking. In short, they form a truly chemical food. Good digestion and perfect assimilation form healthy blood; and healthy blood is the essential prerequisite to proper histological nutrition. "In the blood is the life." The blood is truly liquid nerve and muscle tissue. And since the hypophosphites are so valuable in forming healthy blood, they are to be regarded as the best of food tonics in the treatment of the defective nutrition characteristic of phthisis.

The formula originated by Dr. Churchill, of Paris, for the preparation of the "Syrup of the Hypophosphites," which has his name, is an excellent one. It is a chemical food. But Messrs. Purcell, Ladd & Co., of this city, have made some important and perfectly compatible additions to the original Churchill formula, which, we think, make their preparation a far more valuable one as a remedial agent, and which give to it a wider range of usefulness. Their preparation (known as the "Syrup of the Hypophosphites Compound") is an appetizing, pleasant, invigorating nervine and general

tonic and food. It increases the appetite, promotes digestion and the assimilation of food.

What has been said inferentially of its great tonic and restorative value in phthisis, is equally true of its value in chronic bronchitis. In fact, in all the diseases marked by nervous and muscular debility-whether in the wasting marasmus of the tissue-starving infant, or in the exhaustion of brain energy from mental overstrain, or in the declining and failing powers of old age—this is the tonic par excellence—the nutriment sine qua non. It contains many of the important salts of that complex fluid—the blood—potash and lime, so essential to the muscular, osseous and nervous systems, and iron and manganese, the great hæmatics, so necessary to enrich the blood and strengthen the body. It also contains the two great vegetable tonics, quinine and strychnia, both of which, in small doses, are of great value as nervine, as well as general tonics. These, as bases, are all in combination with hypophosphoric acid.

Now these different salts are readily decomposed or "broken up" in the stomach, and phosphorus is liberated and furnished in its free state, which is conspicuously present as a component of brain, nerves, semen, etc. Phosphorus is indicated in cases of nervous exhaustion and debility, so often met with, and so deplorably affecting and afflicting

suffering humanity.

This "Syrup of the Hypophosphites Compound" is not unpleasant to the taste, and can be readily and easily taken even by children, without disturbing the digestive functions, and is indicated whenever the nervous system is suffering from exhaustion or mal-nutrition, and needs repair.

The purity of these different salts, which the syrup contains in a state of perfect solution, is of the greatest importance. Purcell, Ladd & Co. publish the formula on the label around every bottle, and guarantee that the preparation is put up exactly and strictly in conformity therewith Each fluid ounce contains:

Potass. hypophosphi	tegr. jss
Iron "	gr. jss
Lime	gr. j
O //	gr. j
Strychnia "	gr. ss gr. 1/16

The dose for a grown person would be from one to four

teaspoonfuls three times a day in a little water.

Purcell, Ladd & Co. are well known wholesale druggists, and have been favorably known in the drug trade since 1840—now nearly fifty years. Their reputation is a sufficient guarantee to the medical profession that their Syrup of Hypophosphites Compound is made from and contains the purest and best materials, and is accurately compounded in exact conformity with the published formula.

ART. IV.—Advances in Obstetrics and Gynæcology.* By WIL-LIAM B. GRAY, M. D., Richmond, Va.

In discharging the duty assigned me of reporting upon the Advances in Obstetrics and Gynæcology since April of this year, as germane and preliminary thereto, I remark, no new diagnostic of pregnancy. While availing myself of every source of information possible, I rely with full confidence upon the microscopy of the triple phosphates, and commend the plan to my professional brethren as being one to be implicitly relied upon, easy of application, and, so far as my experience warrants, of unerring revelation.

OBSTETRICS.

Chloroform the Obstetric Anæsthetic-Also Antipyrin.

By pretty general consent, chloroform is regarded as the agent for anæsthesia in obstetrical practice. Dr. Kreutzman (in the Archives Gynæcology for May) prefers its administration with freshly-prepared oxygen, which is inhaled from a small gas-bag, the gas passing through the chloro-

^{*}Read before the Richmond Medical and Surgical Society, September, 13, 1888.

form. He claims for the admixture greater promptitude a speedier recovery, and without the slightest after discomfort.

Hypodermic injections of antipyrin, by Dr. Querel, in 20 cases of labor, produced "perfect anæsthesia in 15 cases, and without interruption to the progress of the labor."

Cocaine has not equalled the anticipation of experimenters.

Treatment of Vomiting of Pregnancy.

Dr. Brünniche recommends alimentation through a tube, introduced only to the upper part of the esophagus, which is the sensitive region. He reports success by this method in a little over three weeks, notwithstanding the presence of gastric ulcer. (Arch. Gynæcology for May.) Some regard the vomiting of pregnancy as due, in a large number of cases, to endometritis, and claim that it is simply necessary to the cure to remove all sources of irritation ("rest from the desires of the husband.")

Albuminuria of Pregnancy;

Does it justify or demand the induction of labor? Some argue (Dr. Smith) that, without grave reasons to the contrary, premature labor, after the seventh month, should be induced. To your Reporter, this seems a question of very serious and often of vital importance, and each case should be decided upon its individual merits.

Abortion.

When required, the electric plan is generally held in high esteem by the profession, using the strong faradic current for fifteen minutes each time, for two weeks.

In Extrauterine Pregnancy,

Brothers tabulates 43 cases treated by the strong faradic current method, with only two failures. The positive pole was placed in the uterus.

Abdominal Section

Vies with craniotomy in modern obstetrics. On one side, it is argued that to destroy a living child in this, our day, is unwarrantable, with the advantages of antiseptic surgery at hand. Others declare, on the contrary, that to do so under certain circumstances is not only justifiable, but abso-

lutely demanded. Instead of craniotomy, the old Cæsarean section has its advocates, as have Porro's and Sænger's modi-Gusserow claims that Porro's method is only allowable when there is diseased tissue which can, at the same time, receive the needed surgical attention. Prof. Simpson subscribes to the same opinion. Dr. Robert P. Harris, of Philadelphia, publishes 100 cases of the Sænger operation. Of these, 50 were operated on in the United States by 31 operators, and 50 in Europe, also by 31 surgeons. In the United States there were women saved, -35 lost. 15 children saved (or extracted alive), extracted dead, 4

" children extracted alive, - 48
" " dead, - 2
The latest statistics I have seen come from Dr. Sænger

lost.

40

10

himself, and represent the record of his own "Cæsarean sections," kept by himself, up to October 21, 1887. He had 76 cases. Of these

There were saved 58, or 76.3 per cent.

" " lost 18, " 28 " "

In Europe there were women saved,

There were of this number of 76 patients, 52 who were operated upon in Germany, with 46 recoveries, or 88.4 per cent., and six deaths, or 11-6 per cent.

It is stated by Dr. Aisensttat, of St. Petersburg, that three women performed the Cæsarean section upon themselves, and that two of them recovered. Your Reporter was informed by Dr. H., of Va., that he performed the operation with a pocketknife upon a mountain woman, who recovered. It was in the night, and all the assistance he had was a lightwood torch in the hands of a female attendant.

By all modern operators, with a few exceptions, the most thorough and rigid disinfection is urged. Bichloride of mercury is the chosen agent for this purpose. The Germans lead in the minuteness and in the plan of this protection. Laparotomy for Extra-Uterine Pregnancy

Is strongly recommended, during the first three months, by Hawley, of New York, and Schwarz, of Germany. Henckel reports seven cases treated by hypodermics of morphia (gr. ss.) into the sac. This was successful in five cases. Two patients died; one of gastric hæmorrhage, and the other of suppuration of the sac and sepsis, after puncture through the vagina. Laparotomy for extra-uterine pregnancy has been performed by Hawley once, and Veit seven times. In both instances the operation was a success. The latter also operated on three cases moribund after rupture of the sac. Of these, one recovered. (Am. Journal Med. Sciences for August.)

The Antiseptic

For every obstetrical purpose is the bichloride of mercury, 1 to 2,000. Soaping, scrubbing with the fingers, and even scraping with the curette are regarded by some as necessary adjuncts to thoroughly exterminate all microbes

from the external genitals, vagina, etc.

As opposed to this rigid rule of antiseptics, I deem it proper to advert to an interesting paper of Dr. F. E. Chatard (to be found in detail in the Obstetric Gazette for May, 1888), in which he states that, without any other precaution than ordinary cleanliness, in 5,265 deliveries, during a period of 55 years, there were only 26 cases of puerperal fever (1/2 of 1. per cent.), of which 26 cases, 18 terminated fatally, and of these 18 cases, six (or 33 per cent.) died during an epidemic visitation in 1845. Ten of the fatal cases, with one exception, occurred in perfectly natural and easy labors. During the same period, 137 additional cases are recorded, without the slightest manifestation of the prevailing epidemic, though no precautionary measures were resorted to, notwithstanding three forceps deliveries, two podalic versions, two abortions at three and four months, in which, after prolonged and frequent efforts, the placentæ were removed in part only; one case of embryotomy, one of putrid child, and finally, four cases of retained placenta, necessitating the introduction of the hand within the uterus to accomplish removal. All these patients made prompt recoveries without febrile manifestation and during the period of prevalent

puerperal fever. For 18 years (from 1865 to 1883) in this same practice, there has been no case of puerperal fever, notwithstanding the absence of any special provision against infection. During the most active period of the obstetrical life and labors of Dr. Chatard's father, he attended erysipelas, small-pox, diphtheria and scarlet fever, and from these patients went to his obstetrical cases and without discovering any evidence of pernicious effect upon them.

For Rigid Os,

Chloral enemata are much praised.

Quinine is regarded with greater favor than ergot for expelling retained secundines.

GYNECOLOGY.

Failure has so often resulted from pessaries and other mechanical appliances for the cure of uterine displacements and mal-positions, that cutting operations and suturing are becoming popular, and seem to grow in favor. Electricity, too, is growing in favor in various departments of gynæcological work. Dilating and curetting of the uterus for endometritis, fibroid, retained secundines, polyp, adenoma and carcinoma, present a fine statistical record in the June number of the Annals of Gynæcology. Of 150 cases reported, there was not a single failure.

In 338 cases of abdominal section, occurring in the practice of Dr. Walter |Burnham, of Lowell, |Mass., the following exhibit of results is reported, viz:

Completed ovariotomies,		281,	rec'd,	230,	deaths,	51
Hysterectomies,	-	15,	66	3,	"	12
Partial removal ovarian	and					
uterine growths, -	-	13,	66	7,	66	6
Exploratory operations,	-	27,	"	10,	66	17
Omental tumors, -	-	2,	"	2,	"	0

Per cent. of recoveries, 74+; per cent of deaths, 25+.

Completed ovariotomies gave a success of nearly 82 per cent., while hysterectomies amount to only 20 per cent. successes.

Quinine grows in favor as an oxytocic. Ipecac and jaborandi are praised by some.

ART. V.-New Treatment of Diphtheria. By R. A. PATTERSON, M. D., Aurelian Springs, N. C.

The constant discovery of new remedies and new applications of old ones, and the appalling fatality of some visitations of diphtheria, even in this day of advanced medical knowledge, seem to justify the effort to cast upon it every ray of light possible, even at the risk of much repetition.

If it be claimed that the pathology, diagnosis and etiology of the disease are understood, the great diversity of systems of therapy offered by various advocates—some claiming to be well nigh infallible—show that the best mode of treatment is far from being established; and should this priceless boon ever be granted, it must in turn reflect great additional light on the causes and pathology of diphtheria, and thereby act as a prophylactic. Striving to reach this most desirable point, viz: to determine the most successful mode of treating diphtheria, the writer would add another to the list of remedies, or rather a plan of treatment which has proved most efficacious. This being the main object of this paper, as little will be said of the history of the disease as seems compatible with the object cited.

Diphtheria has been described under various names from a remote period, the names being taken apparently from its visible effects. A fibrous deposit on certain mucous membranes characterizes the disease. This membrane may be merely attached to the mucous surface, or may infiltrate it and the tissues beneath. The tonsils and neighboring parts are the regions mainly affected in the early stages, and as it is estimated that three-fourths of the fatal cases result from invasion of the air passages, it should obviously be the object of the practitioner to arrest it ere it extends further. It is firmly believed that this arrest can be made if treatment is begun early on the plan now to be described. If not arrested, the membrane may spread to the larynx, trachea, bronchi, the nasal cavities, Eustachian tubes, middle-ear, the eve, involving loss of vision, the lips, vulva, or anus; and I have observed it attack an ulcer on the foot during an epidemic, being the only evidence the patient gave of the disease.

The first distinctive sign—the gravish white patch—may be preceded by slight inflammation. It may become reddish brown, and varies greatly in consistence as to toughness. If the deep tissues are involved, the removal of the membrane frequently discloses ulceration. If not arrested early, the tonsils and adjacent parts become greatly enlarged, and may be covered also with a muco-purulent secretion. In cases of great severity there may be sloughs from the mouth and pharvnx. The urine is frequently albuminous. the lymphatic glands of the neck often enlarge. The fibrous membrane contains sometimes pus cells, epithelial cells and red blood corpuscles. They also contain bacteria and micrococci. Regurgitation of liquids through the nose, on attempting to swallow, from swelling or paralysis of the parts, or both, is an attendant on bad cases. There is often ptyalism; also stiffness of the parts, causing difficulty of articulation, and sometimes complete aphonia. Hæmorrhage from any or most of the outlets of the body may take place. Instead of much heat, the surface is sometimes cool. Nausea and vomiting may greatly interfere with proper nourishment. The mind is clear in the majority of cases. Uræmia may cause convulsions and coma.

There may be complications of general dropsy or pneumonia. Sudden death has resulted from failure of the action of the heart. Paralysis of various muscles is a frequent consequence. Anæsthesia exists in some cases, and in others hyperæsthesia. All of the organs of special sense may suffer, but as there is no lesion (discoverable) the effect is generally temporary and may occur in mild as well as severe cases. Sudden and fatal syncope sometimes comes on from causes not previously considered dangerous.

One view of the pathology of the disease is, that the bacteria and micrococci find lodgment in the throat in the first instance, migrate to other parts of the body, and so the disease becomes general.

Another theory is that pýrexia and other general symp-

toms are due to the absorption of septic matter from the parts diseased, and so produce septicæmia.

Third, that the disease is general from the beginning, and

that the local manifestations are secondary.

It is generally admitted to be contagious, and also to be produced by neglect of sanitary precautions. The contagion seems to be feeble in some instances, so as to lead to the denial occasionally of its being communicated in that way. Many striking instances however of its contagiousness or at least of its portability could be cited.

We come now to the therapeutical indications in treating this disease, as they appear to the writer, which have been eminently successful, and which it is believed were first proposed by himself. And while this is true, the component parts of the treatment will be recognized as old acquaintances in the therapeutics of diphtheria, the novelty being that they had not previously been used in conjunction and their restorative powers been brought to bare simultaneously.

Calling to mind the three leading propositions as to its pathology, viz: the parasitic, the septic and the originally febrile pathology above referred to, it will be observed, from the well known properties of these drugs, how admirably they are suited to meet the indications and neutralize the

poison.

The rapid multiplication of the poison, be it parasitic or septic, forbids the attendant to await the action of a cathartic, but the antidote must be applied immediately; hence the diminished fatality in cases treated early. Administer at once the old and well-known compound given in the Prize Essay of the late Dr. E. S. Gaillard, viz: potassium chlorate, 5j; tinct. muriate iron, 5ij (or more as the case may seem to require); muriatic acid, dilute, 5ij; water, 5xij. M. S.—Two tablespoonfuls for an adult, every hour, diminished to one or two doses at night. Tonic doses of quinine thrice daily.

For local application, Kennedy's fld. ext. pinus canadensis, 5j; carbolic acid, 15 drops; mix and apply to the af-

fected parts (tonsils and pharynx) with probang or mop immediately after each dose of above solution.

The pinus canadensis is a preparation strongly endorsed by the late Dr. J. Marion Sims, in certain inflammatory affections. The action of the pinus is to turn the membrane to an ink blackness, to cause it to contract around the circumference, to become thicker and to adhere more loosely to the mucous surface and finally in a few days at most to drop off never to return, leaving its base clean and smooth and sometimes of a whitish color, which speedily resumes its normal flesh tint. Alcoholics are administered according to degree of anemia and asthenia. For diet, milk soup and other liquid aliments.

Now, if the properties of the above remedies be considered, they will be recognized as most efficient parisiticides, antiseptics and disinfectants. The combination of potassium chloride, tinct. iron and muriatic acid sets free much of that active disinfectant and antiseptic, chlorine; the carbolic acid acts on the same line also, and the iron and quinine and alcoholics exert their peculiar effects.

Thus it will be seen at a glance, why this system of treatment should prove so eminently curative. It is our earnest conviction derived from experience that few, if any cases, if seen before the air passages are invaded would result unfavorably, if subjected to the above plan of treatment. Hence the importance of its immediate application, not delaying for the action of cathartics. A mixture of equal parts of petroleum and oil of turpentine applied to the throat externally has appeared to act beneficially. When the patient is seen later, and after the larynx and trachea become deeply implicated and death seems imminent, then the aplastic effects of mercury may be invoked or tracheotomy performed if the practitioner approves the operation. But the description of these familiar measures does not comport with the heading of this paper; all that is claimed as being original is the combination of that particular local and general treatment.

An illustration of the action of this plan of therapy may be given in the history of an endemic which presented it-

self in a locality twelve or fourteen miles distant whether through contagion or neglect of sanitary precautions is not known. There were many fatal cases, sometimes as many as three in one family, and the attending physicians characterized it as of a very malignant type and very unvielding. The endemic extended and entered the bounds of my practice. The first patient died. I then combined the above mentioned remedies and treated case after case to the number of twenty without the loss of one. It may be fair to state that a colored boy aged eighteen, had been ill some days when we saw him. There was regurgitation of liquids through the nose, complete aphonia, great enlargment of the throat, membrane covering much of the tonsils and fauces, anæmia and asthenia. I commenced above treatment immediately. He began to improve, and in a few days—the exact number not recollected—he swallowed and spoke with comparative ease. Appetite much improved, the membrane entirely disappeared, and the swelling of the throat subsided, At the last visit, he followed us out and inquired if he might eat peas, knowing his bill of fare was very limited, consent was given; but in a few days his death was reported.

A neighboring physician, a prominent member of the Medical Society of North Carolina, observing our success obtained a statement of the plan of treatment, adopted it with entire satisfaction, and sent it to a professional friend at a distance—himself in the midst of an epidemic of the same, and advised us to publish it for the good of the

public.

Another case was a boy of seven years, who had so far recovered (in fact showed no signs of disease) as to be allowed to play out of doors. He was attacked with bronchitis and subacute inflammation of the stomach, was greatly debilitated, and unable to retain so much as a teaspoonful of water on the stomach. For thirty-six hours the pulse at the wrist was too rapid and feeble to be counted, and during this time he was kept alive by enemata of milk, brandy and quinine, guarded by laudanum; sinapisms were also applied. His pulse gradually returned, for sometime it was indistin-

guishable; the lung and stomach symptoms disappeared, to be followed by paralysis of the legs, from which he finally

recovered, and is now a healthy boy.

The epidemic extended no further than a few cases treated by my neighbor above mentioned, and was without doubt extinguished by the plan of treatment adopted. This occurred in the autumn of 1886.

Clinical Reports.

Intra-Ligamentous (Broad Ligament) Cyst Removed. By P. J. MURPHY, M. D., Surgeon-in-Charge Columbia Hospital, Washington, D. C.

Mary D., æt. 23, colored, was admitted to the Columbia Hospital for Women, Washington, D. C., July 5, 1888, and gave the following history: Married, menses regular and last three to four days; last epoch June 15th. Has had two children (premature); the first was delivered by the feet, and lived one hour. Also had a miscarriage, at three months, about three years ago. Is very nervous, weak and scarcely able to walk; constipated; appetite fair; sleeps badly. Examination: Patient pale and anæmic. Bimanual examination revealed a cyst about the size of a small fætal head, occupying the left iliac fossa; fluctuation was apparent, though the wave was much denser than would be supposed from a cyst of the broad ligament. The uterus itself was slightly turned to the left side (left lateral flexion); otherwise apparently normal, and it was determined to remove the cyst.

July 11th, the patient was etherized, and the usual incision in abdominal section made. On reaching the growth, its contents were evacuated and an endeavor made to remove the cyst, but without success, as the cyst walls were so friable that they were torn at every effort of enucleation. A great deal of hæmorrhage ensued, which was difficult to control, but finally all oozing ceased, and the abdominal cavity was washed out with two per cent. carbolized water 110°F. The wound was then closed with five silk sutures, and a strip of iodoform gauze inserted at its lower angle for drainage. The patient rallied from the shock remarkably well. The following interesting history is given by my Senior Assistant, Dr. John T. Moran, who took care of the

case from beginning to the end:

July 11th, 5.30 P. M.—Temperature, 98.6°; pulse, 100. July 12th, 8.30 A. M.—Temperature, 99.6°; pulse, 104; ordered milk punch every four hours. 12 M.—Temperature, 100°; pulse, 100. 5.30 P. M.—Temperature, 101°; pulse, 116; passed water twice during the day; antipyrin, five grains every four hours.

July 13th, 8.30 A. M.—Temperature, 100°; pulse, 108; commenced menstruating. 12 M.—Temperature, 100°; pulse, 100. 5.30 P. M.—Temperature, 100°; pulse, 84; passed water three times; antipyrin and milk punch con-

tinued.

July 14th, 8.30 A. M.—Temperature, 100°; pulse, 96; menstruating; patient bright and comfortable. 12 M.—Temperature, 99.8°; pulse, 89. 5.30 P. M.—Temperature, 100°; pulse, 84; passed water three times; ordered Hunyadi water to move bowels.

July 15th, 8.30 A. M.—Temperature, 99.6°; pulse, 96; menstruating. 12 M.—Temperature, 99.8°; pulse, 88. 5.30 P. M.—Temperature, 101.2°; pulse, 112; bowels moved three

times, and passed water once.

July 16th, 8.30 A.M.—Temperature, 100.2°; pulse, 108; menstruating. 12 M.—Temperature, 101.4°; pulse, 108. 5.30 P. M.—Temperature, 101.2°; pulse, 106; passed urine

twice: medicine and stimulants continued as above.

July 17th, 8.30 A. M.—Temperature 101.4°; pulse, 108. 12 M.—Temperature, 102.6°; pulse, 112. 5.30 P. M.—Temperature, 102.4°; pulse, 116; menstruation ceased. Tongue heavily coated; bowels have not moved since the 15th, though Hunyadi water has been given repeatedly. Complains of great pain in abdomen. Considerable purulent discharge from track of sutures; opening left for drainage, and also at upper end of incision. Passed water twice during the day. Ordered five grains of calomel, also antifebrin seven grains at 8 P. M. Irrigated abdominal cavity with six quarts of water 110°F., and renewed drainage gauze, and at 10 P. M. temperature had fallen one degree.

July 18th, 8.30 A. M.—Temperature, 101°; pulse, 108. Rested well. Stopped antipyrin and substituted antifebrin and quinæ sulph., each three grains every four hours, and ordered milk punch every two hours. 12 M.—Temperature, 102.6°; pulse, 120; ordered an enema at 4 P. M. 5.30 P. M.—Temperature, 102°; pulse, 116. Bowels moved freely from enema, and passed urine three times. Removed sutures; complete union had not taken place at upper end of incision. Considerable discharge continues. Irrigated

cavity, with one per cent carbolized water 110°F., and re-

newed drainage.

July 19th, 8.30 A. M.—Temperature, 101°; pulse, 112. Rested well during night, and feels bright and comfortable. 12 M,—Temperature, 102°; pulse, 116. 5.30 P. M.—Temperature, 101.2; pulse, 112. Irrigated cavity with one per cent. carbolized water 110°F., and renewed drainage. Medicine and stimulants continued.

July 20th, 8.30 A. M.—Temperature, 102°; pulse, 108; did not sleep well. Complains of pain in abdomen. Bowels have not moved. Purulent discharge increased. An opening has formed about middle of the line of incision, and the one at the upper end had enlarged. Irrigated the cavity one per cent. carbolized water 110°F. Renewed drainage. Hunyadi water to move bowels. Medicines continued. Milk punch every two hours, 12 M.—Temperature, 101.2°; pulse, 104. 5.30 P. M.—Temperature, 102.4°; pulse, 112. Bowels have moved four times, passed water freely, and is quiet and comfortable.

July 21st, 8.30 A. M.—Temperature, 101.2°; pulse, 108. Very little pain since yesterday. Bowels moved six times—actions of healthy character. 12 M.—Temperature, 101.4°; pulse, 104. 5.30 P. M.—Temperature, 101.8°; pulse, 108. Bowels moved three times since morning. Ordered calomel one-half grain; bismuth subnit. grain xv, every four hours. Medicines and stimulants continued. Discharge from wound about same. Irrigated cavity with carbolized

water 110°F., and renewed drainage.

July 22d, 8.30 A. M.—Temperature, 102.6°; pulse, 108. Bowels moved but once since yesterday. Patient not so bright, and complains of pain in abdomen. 12 M.—Temperature, 102.2°; pulse, 108. Renewed drainage. Discharge somewhat decreased. 5.30 P. M.—Temperature, 103.1; pulse, 120. Five movements of bowels during day, and urinated twice. Calomel and bismuth to be given when necessary. Ordered antifebrin grains vij, and at 10 P. M. temperature was 101, pulse 118.

July 23d, 8.30 A. M.—Temperature, 101.6°; pulse, 108. Rested well and is brighter. Tongue heavily coated. Suffers very little pain. 12 M.—Temperature, 99.6°; pulse, 100. Discharge decreasing, and upper opening closing up. Renewed drainage. 5.30 P. M.—Temperature, 99.4°; pulse, 100. Bowels have moved seven times to-day. Bismuth and calomel continued. Patient bright and cheerful. Milk

punch ordered every three hours.

July 24th, 8.30 ·A. M.—Temperature, 98.8°; pulse, 96. Slept well, and is bright and cheerful. Milk punch every four hours, and antifebrin and quinine discontinued. Bowels have not moved since last report. Wound still discharging, but mostly from abdominal wall. Drainage and dressing renewed. 12 M.—Temperature, 99.6°; pulse, 96. 5.30 P. M.—Temperature, 99.8°; pulse, 100. Bowels have not moved. Tongue still coated. Passed urine three times during the day.

July 25th, 8.30 A. M.—Temperature, 98.2°; pulse, 84. Rested well, and is in excellent spirits. Bowels have not moved. Tongue coated. Renewed drainage, and applied dressing. 12 M.—Temperature, 99.2°; pulse, 88. 5.30 P. M.—Temperature, 99.2°; pulse, 84. Bowels moved once,

and passed urine three times.

July 26th, 8.30 A. M.—Temperature, 98°; pulse, 80. Slept well. Suffers little pain. Tongue coated and dry. Ordered ol. terebinthinæ made into emulsion every four hours. Discharge considerably lessened, and wound healing nicely. Ordered light diet.

August 23d.—Abdominal wound healed nicely. Patient discharged cured, and much improved in health and strength.

No tumor could be felt on bimanual examination.

Traumatic Tetanus—Report of a Case—Recovery. By E. W. ROW, M. D., Orange, Va.

The preponderance of evidence seems to be accumulating, gathered from the experiments of many accurate observers, that tetanus is a contagious disease.

Rosenback affirms that he has discovered the specific microbe of tetanus. The experiments of Carl, Rattone and M. Bonome prove conclusively that pus from patients afflicted with tetanus, or from persons dead from this disease, injected under the skin of animals, will produce tetanus in a very short time. Vernieul believed that this fearful disease was always the result of a specific cause, and closely related to infectious microbian diseases. Dr. Shakespeare believes that tetanus in the horse and mule is transmissible to other animals. In the Virginia Medical Monthly (June, 1888, page 188, and July number, 1888, page 266—in the

translation by Dr. Hoge, and letter from Dr. Warren-Bey) will be found exceedingly interesting, and alarming evidences of the contagiousness of tetanus.

Peifer declares that trismus neonatorum is an infectious disease, and Beaumann produced tetanus in mice and rabbits by injecting fluid from the navel of an infant dying from trismus. Guinea pigs were inoculated from the dead mice, and died in a few days with tetanus.

In view of the facts gathered from these and other observers, it becomes us to be on our guard, and to treat every injury, however insignificant—the minutest pathological lesion, mere abrasions—with antiseptics. Even the puncture of the hypodermic needle may, by carelessness, become infected with the specific bacillus of tetanus.

Tetanus, just now, being a subject of so much interest, I have concluded to report a case which recently came under my care:

Emma Taliaferro, colored, age 25, weight 140 pounds. good constitution, about three days before she came under my observation had jumped into an ice-house, a distance of about three feet, and came down with her left bare foot on an iron rake. Three of the teeth were deeply driven into the sole of the foot-one penetrating about the centre of the arch, and the other two teeth on either side in a diagonal direction. The wounds had bled freely, and she suffered very little inconvenience, attending to her regular duties, until two hours before I was called to see her. On awaking the third morning after the accident, she discovered the injured limb stiff and slightly painful; the muscles of the arms and neck and jaws were disposed to contract, and were occasionally exceedingly painful. She, however, got up and began getting breakfast, but was suddenly taken with such terrible spasms in her face, neck, arms, legs and abdomen as to cause her to fall upon the floor, where I found her, on my arrival, June 29, 1888.

The pains were excruciating in all the muscles generally, but she complained more of pain in the face and abdomen, remitting occasionally, but returning anon with increased vigor. At the height of the paroxysm, there was pleurosthotonos of left side. The countenance was anxious, breathing accelerated, and at times labored; pulse quick and

corded; temperature normal, skin cool, and the pupils con-

The treatment was commenced by giving hypodermically one grain morphia sulphate, followed by inhalations of chloroform. The paroxysms would remit in intensity, but would never "let up" entirely. In an hour, morphia gr. j and sulph. atropia $\frac{1}{64}$ gr. was again given, and the chloroform was administered at each increase of the spasms. The following prescription was ordered:

M. S. Give teaspoonful every 1, 2 or 3 hours, accord-

ing to frequency of the spasms.

Mrs. W. (in whose employ our patient had been for a long time, was a very intelligent lady, and very much interested in the case) nursed her faithfully night and day, and carried out all the directions to the letter, keeping the paroxysms in check by chloroform, and giving the tincture of cannabis indica and chloral mixture every hour. Having been called to other patients, Dr. C. M. Moncure kindly consented to see my patient. On arriving about night, he found the paroxyms increasing in frequency, recurring every few minutes, with continued tonic spasms during the intervals. He placed the patient profoundly under the influence of chloroform, and directed the same treatment to be continued. After this she had short intervals of entire comfort, until about 4 o'clock A. M. on June 30th, when the paroxysms became again frequent, and she was again placed under the influence of chloroform; and after return of consciousness, she was given two teaspoonfuls of the tincture of cannabis and chloral mixture. At 9 o'clock A. M. there was perfect relaxation of the muscles; no trismus; and I found her sleeping soundly, occasionally muttering incoherently. However, the rest was of short duration. When she aroused, the paroxysm seemed to have gathered power by repose, and she was thrown into the most violent contortions. The limbs became tense, her jaws clinched, with her chin violently drawn down upon the breast, and the body was bent forward—the face almost touching the knees. The spasm was soon mastered by chloroform, and morphia sulphate 14 gr. under the skin, and the following pill, was ordered to be given: R. Ext. hyoscyami grs. ij; ext. belladonna gr. 1/3; pulv. codeia gr. j. M. S. Alternate with the chloral mixture; and to continue the chloroform administration when found necessary. At my afternoon visit I found the patient more comfortable, and having intervals of rest for twenty minutes. The same treatment continued during the night, together with stimulants and nourishing diet. The directions were faithfully carried out by Mrs. W., and to her watchfulness and intelligent nursing I attribute in a great measure the patient's ultimate re-

covery.

July 1st found the patient doing well; the paroxysms, however, returning at intervals, especially from any sudden noise, a jar of the floor, or even of a strange voice, or puff of wind. Enema of turpentine and castor-oil relieved tympanites, which became prominent on the third day. The patient continued to improve under the treatment. I gradually withdrew the medicines and increased the amount of nourishment: enjoined perfect quiet, assisted by the bromides of sodæ and potash She was able to walk about in her room on the tenth day from the original injury. Local treatment was resorted to in order to cause suppuration. Sharp-pointed stick-caustic was introduced into the punctured wounds, followed by hot lye poultices, which produced slight suppuration on the third day. Warm, or rather hot, applications gave the patient great relief, and was kept almost constantly on the facial muscles by her request.

I cannot close without acknowledging my indebtedness to Dr. C. M. Moncure, and to medical student, William Hume, for aid rendered to my patient at opportune moments, when other engagements prevented me from being

present.

In the treatment of this case it is very difficult to determine which of the medicinal remedies were of the most utility. I am disposed to think that the chloroform and chloral were the remedies that produced the best results; yet, in treating a case of this terrific disease, I would be disinclined to leave out tincture of cannabis indica, extract of hyoscyamus, and extract of belladonna. I believe that a combination of these remedies, given in the proper way, at the proper times, together with good diet, and perfect quiet, will enable us in the future to have better results. I would suggest, in combination with the above remedies, the use of antiseptics in all cases of tetanus.

Gorrespondence.

An Improper and Unjust Law.

Mr. Editor—I have lately examined the "Pharmacy Law," as it is termed, and find that after a druggist has been registered, he is required by the law to have his certificate renewed annually, and pay a fee of one dollar to the Board of Examiners. Why this requirement was made, it is difficult for me to understand. Suppose all the physicians, who pass their examinations by the State Board of Medical Examiners, and receive their certificate of satisfactory examination, and pay the fee of five dollars, should annually be required to renew their certificates, and pay an additional fee of one dollar, do we not know that such a law would endanger the continuance of the whole law relating to the State Board of Medical Examiners?

The law requiring the druggists to pay an annual fee of one dollar, or forfeit their privilege to continue their business, or be fined not exceeding twenty-five dollars, is improper and unjust, and should be repealed. A Physician.

Original Translations

From the German. By M. D. HOGE, Jr., M. D., Richmond, Va.

Diagnosis of Carcinoma of the Kidney.

Dr. Robert Hoffman, of Baltimore, Md., writes to the New Yorker Medizinsche Presse, July, 1888, as follows: The patient, a factory operative, 51 years old, suffered many years before from pneumonia and typhoid fever. His present trouble dates from a blow of a heavy weight falling on his back nine months ago. He at once complained of great pain in the back and chest; and on examination a depression was found in the lumbar region of the spinal column. After eight weeks' treatment, he was able to walk, but could not hold himself erect. About three months later he was taken with a most violent pain in the right side, which lasted an hour. While making water the stream would be

suddenly checked, and after passing a "red mass" as long as his finger, he would finish. This condition went on for six months, when he sought medical advice. The urine was found to contain albumen and blood cylinders. was no fever, and on percussion over the region of the right kidney, it was found to be enlarged about the size of a man's hand. Very often trauma is followed by periephritis, then fever is present; further, pyelo-nephritis may follow, as proved by microscopic examination. In nephritis we find particles of kidney tissue and malpigian casts. Tuberculosis of the genito-urinary organs can be excluded on negative results of cheesy material, elastic fibres, and The correct diagnosis is probably carcinoma of the kidney, in favor of which diagnosis the hæmaturia and the existence of the tumor in the kidney region, speak quite certainly. For treatment, the following was ordered: Ol. terebinth., secale cornut., eq. ferri sesquichlor., for the hæmaturia: and fld. ext. condurango, for carcinomatous marasmus.

Typhoid Malarial Fever.

Dr. P. Werner, Narwa, remarks (Rundschau, April 15, 1888) that his observations were made in one of the prov-

inces of Russia, on the banks of the Volga.

He distinguishes four forms of malaria. (1) The usual form, in which the disease appears suddenly. The more violent the beginning, the shorter and more dangerous the attack; the tongue is heavily coated, and there is loss of appetite; generally constipation; enlargement and pain of the spleen; the skin is moist. Convalescence follows quickly, and lasts but a short time; in three days at the latest, can the patient resume work. (2) In the adynamic form, the fever is moderate; there are no abrupt changes; the skin is dry; the tongue is shining and dry; some diarrhea. Prognosis is good, and convalescence lasts about five days. (3) The comatose form is only observed during the height of the epidemic, and stands in direct relation to the intensity of the epidemic. The mortality is about 50 per cent. (4) The hæmorrhagic form occurs only among the poorest and most degraded classes. After two or three days there appear all over the body livid blood extravasations of the skin, and frequent bleeding at the nose; the belly is retracted and painful; stools are fluid and bloody; the spleen enormously enlarged. Death takes place between the sixth and fourteenth day with collapse.

When to Give Morphine or Chloral Hydrate.

Dr. Aufrecht (Centr. f. Nerven Krl., Rundschau, April 15, 1888) says this question is not fully decided as yet. Aufrecht lost two cases of pneumonia in giving morphine during the height of delirium and great restlessness; whereas, in two others in which chloral was given under the same circumstances, it had a most happy effect. For delirium tremens, chloral is the only safe remedy we have; it must be prescribed in drachm doses. The combination of chloral and morphine is highly dangerous. In eclampsia and maniacal excitement, chloral is equally efficacious. In insomnia of old people, it can be safely used, always beginning with a very small dose. In distressing pains from serous surfaces (peritoneum, pleura, pia mater), it is best to give morphine hypodermically; but when there are cramps and contractions of canals, whose walls contain smooth vascular fibres (uterus, intestines, gall-bladder), then it is best to give morphine per orem. Kolpitis Emphysematosa.

Zweifel (Arch. f. Gyn., Rundschau, April 15, 1888) has recently demonstrated a case of this character, in which there was a gas-cyst, which came from a gland. The gas was sent to Hilger, of Erlanger, who, on examination, found it to be tri-melthylamin. The cyst was probably produced by

the gland becoming closed by inflammation.

From the French. By R. M. SLAUGHTER, M. D., Theological Seminary, Va.

Cancer of the Larynx.

[Continued from page 402, September number of this

journal.]

Laryngoscopic Examination. The mirror gives us information as to the seat of the tumor, its point of inflammation, form, volume, etc.; but, in the beginning, it does not always enable us to recognize the nature of the affection. Often the lesion consists simply in a hyperæmia or a congestion of the mucous membrane, and in a slight, circumscribed swelling or irregularity, which may seem to be a part of the tissue on which it is developing. Later, there appears a projection which takes the form of a rounded tumor, dark red in color, limited in extent, and having a broad base. The tumor, which may attain the size of a walnut, projects into the lar-

yngeal cavity. At other times the cancer has the aspect of polypiform vegetations, single or multiple, more or less pediculated, their points of implantation being usually quite broad, and the surrounding mucous membrane dead red in color. The tumors increase by forming excrescences having the aspect of cauliflowers, which fill more or less completely the larvngeal cavity. The cancer may show itself also under the form of a diffuse submucous infiltration, which is generally not extended. Its wine-red surface is smooth, or covered with small greyish nodes. The lesion, which attacks in order of frequency the ventricular bands, the vocal chords, the epiglottis and folds, invades the neighboring parts to such an extent that it is soon difficult to locate the point of origin of the tumor. A large part-half or even the whole larynx—is thus invaded. It is not rare to see a slight tumefaction, due to the appearance of a new cancerous nucleus, develop at points quite distant from the original point of origin. As soon as ulceration begins it extends rapidly. The surface is then bathed in a sanious, purulent, mucopurulent, or sanguinolent secretion. When the ulceration develops at points where the submucous tissue is lax, there may be ædema of the part. When the epiglottis is attacked, it assumes the aspect of a rounded unequal mass covered with mucous membrane—covering the glottis—which shows itself as an irregular, narrow opening, comparable to a split or cleft. The bands and chords resemble a shapeless, ulcerated tumor—the space between them often becoming so narrow that surgical intervention is rendered necessary. The neoplasm may destroy the cartilages and reach the external parts. The thyroid body and the ganglia may also soften and ulcerate.

March, Duration, Termination, etc. During the first period, which may last from a few months to two or three, or even twenty years (Krishaber), there exist only slight troubles—such as alteration of the voice or dysphonia—according to the seat of the tumor. In the course of the second period, as the calibre of the larynx or the esophagus is progressively diminished, there comes on more marked dysphonia or dysphagia, according to the position and size of the neoplasm. Surgical intervention is often necessary on account of the threatened asphyxia. During this period of ulceration are observed especially the intolerable pains, abundant salivation, hæmorrhages and odynophagia. In the cachetic period the patient weakens, has the straw yellow tint, and exhales a fetid and repelling odor, which is due to destruction in some part of the tumor, and death soon occurs.

Sarcoma, of all the varieties of cancer, progresses most slowly. It may exist for a long time without causing any serious trouble. On the contrary, the evolution of encephaloid is the most rapid. This variety has also the greatest ten-

dency to invade neighboring parts.

The duration of the disease varies necessarily with the nature of the tumor and the surgical intervention. Patients having encephaloid live upon an average two and a half to three years (Fauvel, Lublinski), while those having epithelioma last only about four years. The progress of sarcoma is much less rapid.

Death may supervene slowly or suddenly—a rapid termination being due to quick suffocation, hæmorrhage, compression of recurrent nerves (Binet), or to syncope (Lublinski). The slow death is caused most often by inanition or asphyxia, or to some intercurrent bronchial or pulmonary

affection.

Diagnosis. An early diagnosis is very desirable if the surgical treatment of late recommended is to be efficacious. Consequently it is of importance to make a laryngeal examination not only in the case of every patient who complains of change of voice, but also of those who have pulmonary troubles which the physician thinks are due to asthenia or bronchial compression—affections which are most frequently confounded with commencing cancer of the larynx. During the first period the laryngoscope shows either a diffuse submucous infiltration or a polypiform tumor. The diffuse infiltration may be confounded with hypertrophic laryngitis, but the latter is not painful. Besides, when the mucous membrane is ulcerated, it has a deep wine-red tint, the infiltration is not circumscribed, and both ventricular bands are attacked most often, as well as the arytenoidean region. This is not the case in cancer, the infiltration being circumscribed and in most cases confined to the left band. Tuberculosis may simulate in some cases cancerous disease, as in a patient of Gussenbaur. This patient, a young man of 24, whose mother died of tuberculosis, had had, for eight months, aphonia and intense dyspnæa. The laryngoscope showed a tumor of the vocal cord, without a well-marked trace of inflammation. Tracheotomy was done, and the microscope showed the piece examined to be of cancerous nature. Total extirpation was then performed, but some months later the patient died of pulmonary phthisis. A second histological examination of the tumor showed that the neoplasm was tuberculosis, with a considerable proliferation of epithelial cells.

When the tumor takes the form of a vegetation it may be taken for a polypus, and it is sometimes difficult to differentiate between these two varieties of neoplasm, especially when the polyp is raspberry or cauliflower-like—a deep red and purple instead of being pale and rose-colored, or if it is hard instead of being of a pulpy consistency. The habitual seat of the polypus is upon the vocal chords, generally at the level of the anterior commissure, and there is neither congestion of the mucous membrane, nor pain, nor change in

the general condition in the benign tumors.

Fibroma is isolated, and develops upon the surface of the anterior two-thirds of the vocal chords. It is round, oval or pyriform, and at its level the mucous membrane is smooth, shining, rarely rugous and granulous. Its color is dull blue or clear rose. In spite of these differential characteristics, errors in diagnosis may occur, the true nature to be revealed by the evolution of the disease and by microscopic examination of the tumor. In the ulcerative period, adenopathy is the only one of all the subjective symptoms which is of any diagnostic value. Radiation of pain to the ear and face is a symptom of no value, and it does not even occur in all cases of laryngeal cancer (Koch).

The ulcerative period of cancer is most apt to be confounded

with syphilis and tuberculosis.

The classic form of laryngeal tuberculosis is little likely to be confounded with cancer, for the coloration of the palatine arch, of the pharynx and epiglottis, the infiltration of the arytenoid region, folds and bands, the appearance of the ulceration, the seat of the polypiform and yellowish vegetations, the condition of the lungs, and the age and antecedents of the patient are important diagnostic elements. But a diagnosis between cancer and the varicose form is much more difficult. The diagnostic points are the seat by predilection in the posterior commissure of tuberculosis, the pinkish blue or grayish color, the vegetations, their friability, the youth of the patient, the condition of the lungs, the march and solution of the disease, and the discovery of ba-Nevertheless, there may occur cases in which there is a co-existence of the cancerous and tuberculous tumors, and cases have been known in which the slow development of a larvngeal phthisis gave rise to errors of diagnosis. It is then necessary to resort to histological examination in all doubtful cases.

The diagnosis between cancer and the ulcero-pustular form of syphilis is difficult to make, Krishaber insists. In the

latter disease, however, vegetations occur only when the ulcers cicatrize, which is not the case in the polypous form of cancer, in which the ulceration and vegetation progress together. And besides, syphilitic ulcerations have their seat principally at the level of the epiglottis, the folds or the arytenoids. They are gravish in color, with clearly circumscribed margins, perpendicular in height, and present a carmine red ulceration. In syphilis, the aryteno-epiglottic folds are frequently the seat of an ædema, which comes on with great rapidity. Besides these lesions, the existence of cicatrices may also be declared. Other diagnostic signs are to be found in evidences of syphilis in other parts of the body, the progress and succession of the different symptoms, and especially the diminution of the ulceration by the elimination of gummy masses and the tendency to adherence of the vocal chords. Specific treatment may also aid the diagnosis, but it always precipitates the fatal progress of cancer. In doubtful cases histological examination should be resorted to. Syphilis and cancer may co-exist, giving rise to a hybrid gumma.

In the third period the diagnosis is rendered easy by the adenopathy, fetidness of the breath, the general condition,

and the laryngeal condition.

Characteristics of the Varieties of Cancer. Sarcoma occurs generally in young men, under the form of a circumscribed tumor, rounded, hard, sensitive, smooth or lobulated, and sometimes polypiform. It is very rarely that several sarcomata are found in the same subject—indeed, there are only four cases on record of these tumors occurring symmetrically upon the chords or bands. The fibro sarcoma and the fasiculated sarcoma remain circumscribed for a long time, while cellular sarcoma much more rapidly invades the neighboring tissue. The tumor rarely ulcerates, and when it does, it is only late. It remains limited at the surface, without causing hæmorrhage, and without giving rise to abundant purulent, sanious or fetid secretions. The supra-sternomastoid glands remain normal, though Czerny and MacLeod have each seen a case in which the lymphatic glands were invaded by the sarcomatous tissue. If this neoplasm reaches the neighboring parts by destroying the cartilages and peripheral tissues, it is then difficult to distinguish from cancer proper.

Epithelioma and Carcinoma are often difficult to differentiate, except by histological examination. Epithelioma presents itself generally under the form of a tumor, having a

large, irregular base, surrounded by nodules, which may assume a vegetating or papillomatous form, and slowly invade neighboring parts. The neoplasm ulcerates, leaving bare a fungous, grayish surface covered with pus and mucosities. Upon its borders develop a series of vegetations, which in their own turn ulcerate, thus increasing the extent of tissue lost. Sometimes at the posterior commissures this forms soft, gelatinous, whitish tumors, which become abscesses, which, by reason of their volume, inconvenience respiration and deglutition. If these abscesses do not open spontaneously, surgical intervention is necessary.

The Encephaloid or Medullary Carcinoma begins as a smooth and more or less well limited medullary tumor, bulging upon the mucous membrane, which is of violet-red tint. The neoplasm resembles sometimes a broadly-pediculated polyp, which may be compared to a mushroom, whose consistency is soft and lardaceous, and color whitish-gray or reddish. The tumor grows rapidly. It takes on a mammillated, irregular appearance, and a whitish-rosy tint, with ecchymotic spots. Ulceration often occurs before the complete development of the tumor, being seated generally at the most elevated part of the neoplasm. The ulceration is irregular in form and grayish, with indurated and raised borders. It is covered with pus, mucosities and blood, and may give rise to such abundant hamorrhage as to endanger life. The surrounding mucous membrane is indurated and tumefied. From the centre of ulceration develops proud flesh, which spares for quite a time the healthy tissue. The ulceration gains in depth, destroys the sub-mucous tissues, and causes a perichondritis which is not slow in denuding and destroying the cartilages. Fragments of cartilage may then project into the laryngeal cavity, forming a kind of valve obstructing the lumen of the canal, when they do not become detached. Krishaber has seen a case in which death was caused by the dropping of a piece of the cricoid cartilage into the left bronchus.

A histological examination should not fail to be made; it is the only means which can furnish confirmative diagnostic proof, for in spite of the characteristics just reviewed, the practitioner will often encounter great clinical difficulties in making a diagnosis, and may make a false one which would have serious consequences in a therapeutic point of view. There have been cases in which the larynx has been removed for tumors which were benign, instead of having done thyrotomy or the endo-laryngeal operation.

Prognosis. The prognosis is always bad. Death is more or less rapid according to the seat and variety of the tumor of the different neoplasms, sarcoma is the least malignant and the fasciculated variety seems to have the most favorable prognosis. Epithelioma develops more slowly in general than enaphaloid which tends most rapidly to produce death on account of its rapid growth and its frequent seat upon the posterior part of the larynx.

[To be concluded in the next issue.]

Alkaloids of Cod-Liver Oil.

MM. A. Gautier and Mourgues who have been studying the chemistry of cod-liver oil (*La Tribune Med.*, 12 Aug., 1888), have extracted from the best brown or fawn-colored oil six alkaloids (leucomaines). They obtained mixture of from 0,350 to 0,500 ($5\frac{1}{2}$ to 8 grs.) of dry alkaloids per kilogramme ($2\frac{7}{10}$ pounds) of oil. This mixture of bases when submitted to fractional distillation separated into two parts:

1st. Volatile bases (butylamine, amylamine, hexalamine,

dihydrolutidine.)

2nd. Fixed bases (aselline, morrhuine) accompanied by an acid responding to the formula C₉H₁₃NO₃, guadinic

acid, which is both an acid and a base.

The three first of these bases are already known; the others are new. Hydrolutidine belongs to the family of hydropiridic bases. It is a colorless, little oily, very caustic liquid of an intense odor. It is little soluble in water, boils at 199° C. and its salts are bitter. Its chlorohydrate crystalizes as does its sulphate. The dihydrolutidine is moderately poisonous. In feeble dose, it lessened the general sensibility. In another article the authors propose to make known aselline and morrhuine. Does cod-liver oil owe a part of its action to these alkaloids? is now the pending question.

In 1886, Chapoteaut believing that cod-liver oil owed its action to a particular principle, proposed the name morrhuol for a product obtained by him by treating the oil with alcohol and distilling. He obtained thus a substance containing the active principles of the oil and possessed of remarkable therapeutic properties. This remedy is well tolerated and absorbed, and its anti-denutritive action is like that of

cod-liver oil.

Treatment of Ulcerations of the Digestive Canal with Iodoform. Dr. Huchard (*Le Praticien*, July 30, 1888) speaks highly of the value of iodoform in ulcerations of the digestive

tube. In the case of a patient in the second stage of phthisis, who for six weeks had been having repeated intestinal hemorrhages for which the use of the perchloride of iron, ergot, ergotine hypodermically, etc., had proved useless, iodoform (the topical action of which upon the intestinal lesions of typhoid has been well established by Renault), completely stopped it in six days. This patient took daily six capsules containing each \(\frac{5}{6} \) gr. of iodoform. He has had also happy results from iodoform combined with the milk regimen in the treatment of ulcer of the stomach. This would seem to indicate, it appeared to him, the infectious parasitic nature of certain gastric ulcers as recently held by Letulle.

Treatment of Obstinate Diarrhæas with Talc.

Dr. Debove (Societé Med. des Hopiteau. La Tribune Med., July 15, 1888) advocates the use of large doses of an inert powder in obstinate chronic diarrheas, which resist other remedies. He used powdered talc or the silicate of magnesia because it is not affected by the gastric juice, and is light and fine. The mean dose is $6\frac{1}{2}$ ounces daily, but double and triple this amount may be given, as Dr. Debove has done in cases of chronic tubercular diarrhea. It is best given in milk in the proportion of 3 to 6 ounces to the quart.

Proceedings of Societies.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

[Thursday, September 6, 1888, J. C. DaCosta, M. D., in the chair; J. M. Baldy, M. D., Secretary.]

Dr. Wm. Goodell read a paper entitled "A Year's Work in Oöphorectomy."

During the year 1887 he had had nineteen cases with one death; but, including ten cases he had since had, there was only one fatal result in twenty-nine cases. The cause of death in this fatal case was uræmic coma from suppression of urine. How far the administration of ether was to be blamed for this renal complication, he was not prepared to say, but he was inclined to think that chloroform was not so liable to cause congestion of the kidneys. The operation was performed for diseased ovaries and tubes, which were greatly crippling her.

The eighteen successful cases were performed for the following reasons, and with the following results:

Uterine fibroids; cured 2, improved 1.

Menorrhagia and ovaralgia; cured 2, improved 1.

Ovaralgia; cured 3, improved 1.

Epilepsy; improved 1. Hystero-neurosis; cured 1. Insanity; unimproved 2.

Pseudo-muscular hypertrophy; unimproved 1.

In his experience, the removal of the ovaries for uterine fibroids is almost always followed by a cure—that is to say, menstruation ceases, the tumor rapidly lessens in size, and no further inconvenience results from bulk pressure.

Of the three cases of menorrhagia associated with ovaralgia, the lack of complete success in one was due to the fact that only one ovary could be removed. The other ovary was so matted in organized exudation as not to be dis-

tinguishable.

The failure in one of the cases of ovaralgia was due to the persistence of menstruation after a thorough extirpation of both ovaries. This is a very rare result, but it will occasionally happen. Menstruation usually ceases in these cases after the lapse of a few months.

In the case in which the ovaries were removed for epilepsy, the result has not thus far been a cure, but the atattacks come at longer intervals. Hardly time enough has elapsed for the woman to reap the full benefit of the operation, for she still has regular catamenial molimina accom-

panied by bloody expectoration.

Time enough has not yet elapsed to decide whether the two insane patients will be improved or be cured by the operation. Each one was an invalid, and each one became physically well, but not mentally so. In Dr. Goodell's experience, which has not been a small one, those cases which exhibit aberration of intellect only during the menstrual periods, will almost always be cured by the removal of the ovaries. But cases of insanity in which the hallucinations are continuous, yet much exaggerated at the catamenial periods, are by no means so likely to be cured by the operation, although they are generally very much improved. In any case, about two years' time must elapse before the nerve perturbation of this artificial change of life wholly disappears, and a cure should not be expected before that lapse of time. What is true in mental cases and in purely nervous ones, is also true, in a measure, when even coarse lesions of the ovary are found. Hence, the surgeon must not look for full results, or for complete freedom from groin aches and pelvic pains, directly after the removal of even diseased ovaries and tubes. He must wait patiently for the ovarian nisus or habit to cease—until, in fact, the menopause has been wholly and fully established in every way.

In the foregoing nineteen cases, the spray was not used, but every other antiseptic detail was carefully carried out. The pedicle was tied with silk; the wound was closed by the same material, and dressed with gauze dipped in a glycerole of carbolic acid. Drainage was employed but once, and that in the fatal case, but this had nothing to do with the issue. Eleven of the cases were treated at his private infirmary, seven at the hospital of the University of Pennsylvania, and one at the patient's own home.

Dr. H. A. Kelly liked the moderate tone of the paper just read. He believed that it is here, as in other fields of work, that we must be often satisfied with relative results. He liked the term "ovaralgia" now better than he once did. Until we are better able to differentiate the exact nature of the lesion in some of these cases, he thought the term

"ovaralgia," used generically, is a good one.

He had a rare case of salaam convulsions which had been treated for a long time. He had been called in to decide the advisability of an operation, and had refused to remove the ovaries. Two years later, the ovaries had been removed, and the patient cured. There did not seem to be any distinct connection between the pelvic and general condition.

Dr. M. Price asked Dr. Goodell if in these operations he had ever noticed, on ligation, any change in the number of heart beats. He had several patients, in whom, on the evening of the day of operation, he had found the pulse as low as 48. He had noticed somewhere that an operator found a drop of the pulse from 80 to 35 on ligating the ovarian nerve. Since then he had had the pulse beats counted on a number of patients at the time of the ligation, and had found a drop of only four or five beats at most.

Dr. J. Price said that Dr. Johnston, of Danville, Ky., had dwelt on the matter of slowing of the pulse very fully. He thought that the explanation of continued pain after an operation was to be found in the adhesion of the intestines, etc. Some of his most satisfactory results had been obtained in cases of extensive adhesions. In a recently reported case, the patient had complained of agonizing ab-

dominal pain. An adherent omentum and a knuckle of intestine had been separated, and complete relief obtained. He had operated on a number of cases where the only lesion found was a general adhesion of the whole mass of intestines. He had thoroughly separated them, and had obtained most satisfactory results. Mr. Tait has repeatedly re-operated to free adhesions He felt that operation for nervous disturbances was of very doubtful benefit, and he never operated unless he found actual disease. He preferred handing the patient over to others

Dr. M. Price related a case in which the whole trouble was due to adhesions. It was supposed to be a case of gall-stones. No disease and no gall-stones were found, but the intestines were matted together. The adhesions were re-

leased, and no pain was felt afterwards.

Dr. Joseph Hoffman—Dr. Price has referred to lowering of the heart beat after application of ligature. In a case of his own, the pulse, which on the day of operation, before ether had been given, was 120, had gone down, in a few hours after the operation, to 58. After ten days, it crept up to 80. This low register of 56 to 58 was sustained even in spite of the temperature being 101° or 102°.

Dr. B. C. Hirst had operated on a case in which a small portion of one ovary was left. The case had ceased menstruating even in spite of the part left behind. A stitch

had passed through the remaining piece.

Dr. W. S. Stewart wished to know the effect of removal of both ovaries on menstruation, if, at the time it should occur, there were any evidences, such as acceleration of the

pulse, etc., as seen at the menopause.

Dr. Wm. Goodell had referred to the point suggested by Dr. Stewart in his paper, and he said that just such symptoms appeared in these cases as appeared after the natural menopause. The full results were not obtained until after these ceased. He had never noticed a fall in the pulse beats as referred to, but he had often seen serious collapse follow the pinching of the ovary. He had seen the pulse fall to 97, and in one case below this. He thought that a counterfeited aneurism was by no means an infrequent symptom of ovarian disease. He had had a patient from a distance, suffering from ovarian enlargement, aortic pulsations, and other nervous disturbances, for which he prescribed. Afterward a local surgeon insisted that she had aneurism. A second examination convinced him that such was not the case. This was afterwards made evident by

her passing through an exceedingly difficult confinement safely. There are two conditions in which he was willing to operate for the removal of the ovaries, although he found no disease. One is *epilepsy*, the other is *insanity*, for in these cases a woman should never conceive. He believed that the State should interfere to prevent men and women who suffer from epilepsy or from insanity from getting married. Indeed, he is not sure that the day may not come when, by act of legislature, an insane man will be castrated, and an insane woman will have her ovaries removed. He has had a good deal of experience with the removal of the ovaries for insanity, and has had some happy results; on the other hand, he had been disappointed at times. In cases of epilepsy he had not had so much experience. He wished that gentlemen who have had such cases would report them.

Dr. C. M. Wilson had had three cases such as spoken of by Dr. Goodell. In two the result was negative. One patient was apparently benefited for some months, but recent reports say that there is a gradual relapse into the

former condition.

Dr. H. A. Kelly had, about three years ago, operated on a girl with a brachial paresis, resulting from infantile palsy, with also epileptic attacks, pre- and post-menstrual in character. For some months there was no improvement, but lately she has become better.

Dr. Kerlin had remarked to him that if, in a good many of these cases of hopeless idiots, operations were performed, removing the respective organs during the period of active growth, they would not develop some of their worse features,

and would be more easily managed.

Dr. J. M. Baldy had a case, which, at the time of operation, looked like true epilepsy. There was excessive pain, vaginismus, and other symptoms. The pain was relieved, but not the vaginismus, for which a subsequent operation was performed. The epileptic attacks had continued. They were, however, becoming much less frequent than formerly.

Some two years had now elapsed.

Dr. J. Price operated on a patient with double pyosalpinx and epilepsy at the menstrual period, and at no other time. The recovery was complete and the relief absolute. Some ten months after she went to another institute, complaining of pain, and was again opened. He wished to know whether or not in these cases convulsions come on during the period in which the patient is in bed after the operation. Dr. Joseph Hoffman had a case of three months' standing, which suffered from næmato-salpinx and suppurating appendix. The patient had been having epileptic attacks. She has been entirely free from them since the operation.

Dr. W. S. Stewart said that he did not think that the ovaries should be removed in all cases of epilepsy, as suggested by Dr. Goodell. He had an epileptic patient, whom he had confined several times, and whose children showed nothing wrong about the intellectual development.

He had removed the ovaries of a woman suffering from epileptic seizures, and she had received no benefit from the

operation. She is now in the insane asylum.

Dr. Goodell said that there was no disease so likely to be inherited as epilepsy and insanity. If Dr. Stewart lived long enough, he would find the children referred to develope the disease.

Dr. H. A. Kelly reported A Case of Cæsarean Section.

He operated April 17th of this year, delivering a living child, and saving the life of the mother. The patient, a slight woman, four feet four inches in height, had been in labor two weeks, her physician, Dr. Ireland, having watched by her bedside constantly for nine days previous to the operation. The waters ruptured four days before the operation. The estimated actual conjugate diameter was two and a quarter inches, although the pelvis was so choked by general edema and hard cellulitic masses that it was impossible to recognize any structures with satisfaction, much less reach the presenting part of the child. The patient's pulse at the time was 142. The operation lasted thirty-five minutes. The after condition and convalescence was one of comfort and rapid recovery. This makes the ninth case operated on in Philadelphia, the first being by Prof. Gibson, in 1835, the historic case of Mrs. Reybold.

Dr. Kelly stated that he had, since that time, also operated upon another case for a relative indication, in preference to performing craniotomy upon a living child, with the result of saving both mother and child. This question, however, of the relative indication, was one of such importance, deserving such careful consideration, that he would reserve it for a more elaborately-prepared paper at a future date.

tor a more elaborately-prepared paper at a future of Dr. Joseph Rice read a paper on

The Abuse of Cæsarean Section,

Of the legitimacy of the Cæsarean section, there cannot be now, under certain restrictions and limitations, a question. In extreme cases, where hasty operation is necessary in order to save the life of the mother, where there is impaction, or where there is a tumor blocking up the uterine or vaginal outlet, discussion or hesitation has little place, and he can operate best who has all resources at command, and acts without hesitation.

The real points for discussion in the light of necessity of the Cæsarean section, in order to terminate a labor with greatest safety, first to the mother, then to the child, are, first, "the degree of contraction in the pelvis;" second, "the advancement of pregnancy;" third, "the chances for the induction of

premature labor."

As to the first: As an epitome of the latest generally received opinion, we have the statement of Greig Smith—"The operation [Cæsarean section] is said to be justifiable when the contraction is so great that we cannot expect to deliver the fœtus per naturales vias, with or without embryotomy, and save the mother. The degree of contraction is generally stated as one and one-half inch and below. But in cases in which much distortion exists, they may have an upward limit of two inches."

Here, then, is a plain expression of conservative opinion as to the degree of deformity necessitating or justifying the operation. "As to the induction of premature labor," says Playfair, "there are few practitioners who would not deem it their duty to spare the mother the dangers of the Cæsarean section," this being especially true, since "there is no amount of deformity, however great, in which we could not succeed in bringing on miscarriage by some of the numerous means at our disposal."

The time at which premature labor should be brought on, varies, of course, with the degree of the deformity of the pelvis. The tables of direction have been admirably constructed by Kiwisch. Briefly, the period for induction of labor lies between the 30th and 36th week, and the corresponding sacro-pubic diameters vary between two inches

and six lines and three inches and five or six lines.

Here, then, naturally follows a discussion of the means for inducing premature labor. Of the many methods proposed at various times, the one seemingly the best is the use of the soft catheter. Its introduction well into the uterus, for a distance of six or seven inches, is an almost certain means of speedily producing labor pains safely. He considers the British rule the best, that Cæsarean section should never be an operation of selection, but one of necessity,

in general terms, as the safeguard of puerperal women. Once establish the precedent that the Cæsarean section is an elective procedure in obstetrics, and thereby lay down also the principle that abdomino-uterine section is a safer procedure than the introduction of a soft catheter into the uterus before full term, the way is laid open to every aspirant for obstetric fame, who is the fortunate possessor of a knife, to find cases for his zeal at every court and corner in the city, if, perchance, he can of himself persuade the parturient woman of the necessity of delivery by the new natural method

of delivery.

An axiom as to the operation is laid down by Lusk: "The precise limits at which the dangers of delivery through the pelvis rise to the level or exceed those from Cæsarean section, is not easy to determine. It depends partly upon the size and ossification of the child's head, and largely upon the experience and dexterity of the operator." The converse of this proposition is true also. The greater the experience and the more careful the observation of the operator, the less frequently will he be led to resort to Cæsarean section, if he hold in mind that it is an operation of necessity, not of election. He illustrates the dangers here referred to, and the justness of the forebodings by the reports of some cases.

Dr. M. Price thought that the duration of labor had nothing to do with the choice of Cæsarean section. He had delivered a woman two weeks since, who had been in labor seven days. It was an occipito-posterior position, and the cervix did not dilate more than enough to permit the introduction of two fingers. He introduced his hand, dilated the os, and applied Simpson's forceps. The delivery occupied an hour and a half, but the woman made a good recovery. Had the case been delayed a few days longer, there might have been a necessity for Cæsarean section. Where there is an inflammatory and ædematous condition of the pelvis, he thought there should be some forcible measures adopted for the delivery of the patient.

Dr. Wm. Goodell thought that the title of Dr. Price's paper was not a fortunate one, for the gentlemen who are called upon to perform Cæsarean section are usually not the attending physicians, and they have had nothing to do with the previous medical attendance on the patient. He believed in the induction of premature labor, and would do it in preference to Cæsarean section. But often the patient herself will not submit to the induction of labor. Dr. Price

would probably admit, one day, into the "Retreat," an Irish woman who has had the most frightful labors, and who had persistently refused, from conscientious motives, to permit the induction of labor. He could conceive of cases where it would be better to perform Cæsarean section, although he had never as yet done so. Probably in some of the cases in which he had formerly opened the head, he would now do the Cæsarean section. He thought a woman might go on safely in labor for an indefinite time, so long as the bag of waters had not ruptured, with very little danger to herself.

Dr. H. A. Kelly remarked that the bag of waters had The pains had ruptured four days before the operation. been very hard before this time, and did not change in character afterwards, although the woman soon dropped into collapse. The pelvis was so choked by a hard cellulitic mass that it would have been impossible to dilate anything or reach anything above the mass. The second paper evidently referred to his case performed on a relative indication, in preference to craniotomy. That case he had not vet reported, reserving it for a full, careful discussion. Where any such garbled, distorted particulars had ever been hunted out he did not know, nor could he reply to criticisms offered in such a tone. His profession was his life, and he came here to impart and still more to receive information in a spirit becoming the dignity of the profession, and he would not make life unhappy by taking part in any miserable bickering.

Dr. J. Price said that in a long experience in the Obstetrical Department of the Philadelphia Dispensary, he had numerous cases of deformed pelves and illy-developed women, some of them very young. He would simply call at-

tention to two typical cases.

No. 1. A case in which Dr. Eliot Richardson had five times done craniotomy or complete evisceration. This woman applied, in her sixth pregnancy, to the Philadelphia Dispensary, and was assigned to Dr. Joseph Fox for induced labor. In a period of five years he had induced labor three times in this case, delivering by forceps, and saving two children—one still born.

No. 2. Also a Dispensary case; had in her five previous labors had the children destroyed. The sixth was provoked at eight months and two weeks. She was delivered with forceps of a fine large male child. In a short experience at the Preston Retreat, he had dealt with two cases of greatly contracted pelves, in both of which Dr. Goodell had twice

or thrice induced labor, delivering living children. Recently two cases were sent in for induced labor or Cæsarean section. The consultants determined on the induction of labor. Both cases terminated favorably, with living children—one of them was a forceps delivery, the other normal. These are only typical cases, but few of the many he could eite in his own experience.

If Dr. Kelly was satisfied that the last case given in the paper was his second Cæsarean section, he was sure he was welcome to his knowledge, as no one else would wish to lay

claim to it.

Dr. J. Price exhibited a specimen of a Small Male fætus, at about the third month, removed from a case of extra-uterine pregnancy. Patient healthy, and twice married. There had been numerous attacks of pain. Recovery from operation was rapid. The following week he did an abdominal section on a woman who was unconscious, and removed an extra-uterine pregnancy. She died twenty-six hours later. This was the sixth case of extra-uterine pregnancy which had developed in his practice in four weeks. Once he went into the country to operate, but found the patient dead when he arrived. Dr. Formad told him that this was a very common result in his experience as coroner's physician.

He also showed a *Dermoid Cyst*, removed from a woman who had suffered from chronic peritonitis for years. Her physician had given her as much as a grain of morphia hyperdomically, and had sat up all night etherizing her, to relieve her pain. She was greatly emaciated, with a rapid, feeble pulse, high temperature, and had been in bed for six weeks. Whole tumor enucleated, no ligatures required. Intestines separated and irrigated—glass drainage. This is the ninth day, and she is rapidly convalescing.

Relief of Vocal Failure. Dr. Chas. E. Sajous, of Philadelphia, Pa., writes: "In vocal failure, the effect of "Vin Mariani Coca" is most satisfactory, not only through its bracing action upon the vocal apparatus, but as a general tonic. I do not hesitate heartily to recommend it, and thus add my name to the long list of laryngologists who have indorsed it." A recommendation of such a character coming from one so able to judge of merit should at once lead those having cases requiring treatment to test this remedy and report on it."

Analyses, Selections, etq.

(I) Jagged Bullet in External Meatus Auditorius; (II) Gunshot Wound of Abdomen, Death Nine Months Later; (III) Radical Cure of Hernia.

Dr. C. T. Peckham, Passed Asst. Surg. U. S. Marine Hosp. Service, Memphis, Tenn., reports these three interesting

cases (N. C. Med. Jour., Aug. 1888.)

(I). Negro man, was shot at close range Aug. 1886; ball entered left angle of mouth, deflected by teeth, passed beneath tragus and impinged on mastoid process. For a year pus discharged from ear; very painful sometimes. Bullet weighing 5ij was removed with bone cutting forceps [but from what location or through what channel is not stated.] After this he could hear low ticking watch at ten inches.

(II). Negro man, was shot at close range Aug. 1887. Ball. 38 calibre, entered about 4 inches below nipple [which?]. and 3½ from median line. He vomited and passed blood at stool. He was weak on entering hospital but no sign of collapse; pulse regular, 120, but not full. Finger ends wrinkled like those of a laundress. There was only local tenderness. Milk enemata every four hours, and bits of ice by mouth. Pulse grew fuller and slower. Stools thin and black for three days, but no clots. On sixth day, teaspoonful of equal parts milk and lime water every quarter hour; next day, milk was allowed, and on thirteenth day ordinary diet. No symptom of peritonitis except purely locally. Temperature only once 1° above normal (third day). In good health two months later. But during Christmas he got on a spree, and had been growing worse until admitted to hospital April 26, 1888. Severe pains shoot down right leg; is dizzy when he stands up; appetite poor; pulse fair; temperature normal; could not locate bullet. May 6th, ate dinner; walked the ward twice, went to bed, and died in a few moments. At post mortem, blood-clot completely filled left pleural cavity; bullet was imbedded in body of ninth dorsal vertebra. Death was due to rupture of an aneurysm of an intercostal artery close to aorta. Base of left lung had formed a part of the aneurysmal sac. Bullet had also cut esophagus, and perforated diaphragm.

(III). Man, aged 40, had inguinal hernia due to lifting. Truss caused pain. Radical operation, according to Gross'

"direct method," was adopted. Success.

Dilator and Intra-Uterine Stem (Rapid Dilatation) for Dysmenorrhœa and Sterility.

Dr. Augustin H. Goelet, of New York, attempts to show (N. C. Med. Jour., Aug. 1888) that gentle dilatation—not divulsion-of the cervix uteri is a safe and satisfactory substitute for all cutting operations for stenosis. To maintain the dilatation a perforated cylindrical stem two inches long is introduced, up to the cup-shaped shoulder. This stem allows drainage through the cylinder. It is kept in situ by a cotton tampon about a week—the patient remaining in bed. In a day or two after inserting No. 10 stem (English catheter size). No. 12 is substituted, and in a day or two more No. 14 is introduced. The stem placed in the cervix that has been dilated prevents reconfraction by exerting constant pressure upon the constricting fibres. During the first day or two, the stem will be firmly grasped by the constricting fibres; but later on, relaxation occurs, when a larger size stem can be introduced. It has long been recognized that an intra-uterine stem is necessary to maintain the result gained by a dilator. The indications for the stem are (I) After dilatation for stenosis, to prevent recontraction; (II) To splint up a flexed womb after it has been straightened by the dilator; (III) To remove obstructions due to hypertrophy or inflammatory thickening and consequent hyperesthesia of the lining membrane of the canal, which it does by constant pressure; and (IV) To secure free drainage from the uterine cavity, and thus prevent diseases of the tubes and ovaries—the most important of them all. If dysmenorrhea exists, with a discharge from the os, which is eroded, and a sound passed through the internal os gives pain, even though there appears to be no obstruction, there will yet be enough inflammatory hypertrophy of the lining membrane of the canal to produce obstruction and hyperæsthesia when congested by menstruation. Dilatation is the remedy. If the condition described has existed long enough to produce ovarian tenderness, with thickening and enlargement, there is less danger in the operation than in the neglect of free drainage.

The operation should be at home of patient, so that she will not have to move afterwards. She should be anæsthetized, placed in Sims' position, and Sims' speculum used. Dr. Goelet uses a modification of Palmer's dilator, with blades stouter and broader on their lateral surfaces to prevent digging into the tissues; the shoulder is more abrupt, and the thumb screw attachment has been removed. If

the cervical canal does not admit the beak after gentle manipulation, insert successive sizes of Hank's conical cervical bougies until No. 11 can be passed, when the dilator will enter. Seize the cervix with an angular tenaculum. When dilatation has been sufficient, remove the dilators, and pass successively larger sizes of cervical bougies, from No. 13 to 16 or 18, to insure complete dilatation and prepare the way for the stem. To secure the cervix for the introduction of the stem, the angular tenaculum is again necessary. The stem is then introduced by means of an applicator, such as that used for the introduction of spongetents, etc. The stem is removed every day, cleansed and replaced, and is used for one week. The patient may get up on the day after its final removal. Subsequent treatment is frequently needed to overcome sequelæ. A number of illustrative cases are noted.

Leprosy in New Orleans.

Dr. Henry W. Blanc, of New Orleans, La., has commenced an article on this subject in September number of the Medical and Surgical Journal of that city. He says it has long been known that a few stray cases of leprosy, which came to Louisiana years ago with the Acadians from Nova Scotia. or as immigrants from the West Indies, have left a taint in the blood of their offspring which crops out occasionally without apparent provocation. In addition, probably, some more recent immigrants from Western Europe brought inherited leprosy into that State. More rarely, some previously healthy parties who have been brought in contact with lepers have themselves become victims to the disease. Most of these cases belong to the humbler class of society, and hence have gradually gathered into the great city of New Orleans, and most of these have been seen by the Doctor in Charity Hospital. His study has been much directed to the mode of spread of this most repulsive disease. His belief being confirmed that leprosy is transmitted in other ways than by heredity alone, he argues in favor of the segregation of lepers. Like syphilis, which it sometimes resembles, leprosy has been divided into the tubercular, anæsthetic, and other varieties. By the word leprosy is meant a disease consisting of peculiar round cell deposits in the tissues, accompanied by a micro-organism known as the bacillus lepræ. It is the elephantiasis of the Greeks-not elephantiasis Arabum, which is a local thickening of the skin, usually of the scrotum, or one of the lower extremities, when

it is called Barbadoes leg. The true leprosy depending upon the bacillus lepræ is the leprosy of the Hebrews, the Chinese, the Sandwich Islanders, etc. Notes of 11 cases, chiefly by Drs. J. H. Bemiss and A. M. Beret conclude this unfinished article. Chaulmoogra oil, in doses of five or six drops, seems to have been the most serviceable remedy.

Treatment of Summer Diarrhœa of Infants.

Dr. P. L. Cortelvon, of Marietta, Ga., thinks the important thing is to secure the nearest approach to healthy mother's milk. He says (South, Med. Rec., Sept., 1888) the best substitute is suitably prepared cow's milk; but cow's milk contains an excess of casein, and is generally acid, while human milk is alkaline. To correct these conditions, let a quart of cow's milk stand for two or three hours in a deep vessel: then pour off slowly one-half of it, and boil; and add to this about two ounces of lime water and two or three ounces of water, boiled and sweetened with milk-sugar. The bottles and nipples should be washed with bicarbonate of soda water frequently, etc. In short, keep everything aseptically clean. Let the child have occasionally a little cool water. Sometimes the old method of boiling flour in a bag for many hours until it becomes very hard, and then grating and adding to the milk, properly diluted, acts nicely. Prepared foods, such as Reed & Carnrick's, or the peptonized milk [Fairchild Bros. & Foster] are often required. Let the child be kept lightly dressed, without anything tight about him. Let him have a cool bath every morning and cool sponging at night, to keep the body free from sour perspiration. Change clothing at night and morning, a flannel binder around the bowels [like those manufactured for the purpose by A. M. & F. D. Lawson, of New York] are useful. Let the child have a plenty of fresh air. To sterilize cow's milk, boil it in strong, well covered vessels, and raise it to as high a temperature as possible. In addition, the milk is made thereby more digestible, as the casein will become more flocculent, and thus more like human milk.

Snake Bite-Recovery.

Dr. J. C. Roberts, of Pulaski, Tenn., gives a graphic account in the Southern Practitioner, September, 1888, of a snake-bite. F. P., age 22, while feeding his horses was bitten on the little finger of the hand just above the nail, quite a considerable hæmorrhage resulting from the wound. Three hours later, the attending physician found difficult

breathing, great depression, stinging pain extending up the arm with numbness and great swelling. He complained of agony over the precordial region, headache, chilliness; the pulse very weak and irregular with occasional nausea. Before seen he had drunk half-a-pint of strong corn whiskey, but felt no intoxicating effect. He was given hypodermically one drachm of sulphuric ether, and in thirty minutes he took one pint of whiskey. Reaction now began to set in. In the meanwhile an injection of a five per cent. solution of permanganate of potash was used around the wound; the arm and hand were enveloped in wet clay. The whiskey was kept up sufficiently to maintain a slight degree of intoxication for twenty-four hours, when on the following day he went home on horse-back feeling pretty gav. Since then he has continued to improve steadily, no sloughing having occurred on the finger, hand or arm.

Medical Expert Testimony.

Dr. D. R. Wallace, Terell, Texas, sums up his advice on this subject in the Texas Courier Record, August, 1888, as follows: First. Let no medical man, whatever his qualifications in any special department, allow himself to appear in court in any other department in which he knows himself defficient in the necessary information. Second: Having consented to appear before a court, he should do well to cast about him and try to form a clear conception of what it is he proposes. Do not be afraid of confessing ignorance; do not affect to know too much. Third: The medical expert should never appear as the partisan of either of the litigants. Fourth: The medical expert should not express an opinion beforehand, when he expects to be called upon by the courts. It is not improper for him to take a fee for his services—that is, a proper remuneration for his labor and time, for stating a medical opinion not as a medical advocate.

Bichloride of Mercury in Corneal Diseases.

Dr. R. H. Chilton, Dallas, Texas, gives a paper on this subject (Texas Courier Record, August, 1888.) For several years he has had no suppuration following operations on the globe after using the bichloride. In hypopyon keratitis, while not a specific, it gives results which no other preparation can. On a patient who had suffered for fifteen days after the pus was removed, a 1 to 4000 solution was used to cleanse the eye, and 1 to 8000 ordered which the patient

could apply every three hours at home. After twenty-four hours pus again accumulated; after this secretion was removed, the large ulcer began to heel. In all cases when sloughing has occurred to the extent of perforation, or where it is necessary to make a paracentesis, it is advisable to wash out the anterior chamber with a solution of 1 to 20,000. This will prevent further invasion of the disease into the chamber and iris complications. In the treatment of recent cases of gonorrheal ophthalmia, it at once arrested the sloughing ulcer of the eyes. Bichloride is well borne in hypopyon keratitis. It is applicable to nearly all cases, while the preparations of mercury in form of an ointment are not.

Advances in Laryngology.

Dr. William Cheatham, Louisville, Kv., reports on this subject in the American Practitioner and News, August, 1888. There is no doubt that some cases of primary laryngeal phthisis are met with in practice. We are still in want of remedies to effect a cure of this; palliative treatment is incumbent upon every physician. Cocaine, iodoform, iodol and sublimate are perhaps the best local remedies. It is maintained by Ariza that larvngeal phthisis can be cured if the lungs are a little affected, and even when the lesions may compel tracheotomy. And why may not this be cured in view of the fact that pulmonary phthisis is sometimes cured as well as tuberculosis of other organs of the body? One of the greatest advances in laryngology is intubation, especially in croup. That the larynx could tolerate a tube was first demonstrated by Desault; in later years practiced by Hoch, Schretter, McLean, Bouchet (1858) and O'Dwyer, who resurrected it in 1880. In over twenty-thousand tracheotomies the per cent. of success is 26.5. The extirpation of the larynx for malignant disease was first proposed by Von Langenbeck in 1854, but it was Watson, of Edinburgh, who, in 1866 first demonstrated the practicability of the operation. Of 103 cases operated on for cancer, 40 have died from the immediate effects of the operation. Only 9 cases have certainly lived over twelve months. Hahn allowed a mortality of 44 per cent. for total extirpation, and 12.7 for partial extirpation. Many surgeons now consider that total ablation is no longer a justifiable operation. Partial extirpation, on the contrary, is an operation which promises much success, but even this should not be undertaken unless it is proved that it is impossible to eradicate the disease by other methods.

Ocular Paralysis.

Dr. S. G. Dabney, Louisville, Ky., sends some notes on this subject to the American Practitioner and News, August. Diplopia, is the most striking sign of paralysis or paresis of one of the external muscles of the eve. In paralytic strabismus, mobility is impaired in the direction of the affected muscle. A second sign of paralysis of an orbital muscle is the position of the head, which is turned so as to replace the action of the muscle affected, and thus avoid double sight; for the same reason the patient is apt to close one eye. Dizziness and indistinct vision are often complained of. Internal ocular paralysis is often associated with the same affection of an external muscle of the eye. Twenty-eight per cent. of cases are attributed to syphilis. Muscular paralysis occurs in about one case in four of syphilitic diseases of the eye. Such paralysis is most frequent in the first and tenth years after infection. We may classify the paralyses as follows: The paralyses may be according to situation, cerebral, spinal, peripheral, and reflex. The causes in the brain may vary from simple hyperæmia to violent inflammation of the nerve centres or brain tumor. Of spinal diseases, the most important is locomotor ataxia. Among the peripheral causes, the most common are diphtheria, rheumatism, hemicrania, tumors, effusion or syphilitic gumma. Of reflex paralyses, mydriasis is probably the most common, the alimentary canal being the most usual source.

Chronic Constipation.

Dr. T. B. Greenley, West Point, Ky., read (Progress, August, 1888) a paper before the Hardin County Society on this subject. The observation of habit at regular intervals, massage over the colon from right to left, and percussing the margin of the anus can do much towards establishing regular daily actions. When there is almost complete atony of the muscular coat, in order to effect a cure, some tonic combined with a gentle laxative must be exhibited. causes of constipation are many. Men who lead sedentary lives, and women, especially during pregnancy, are prone to it. It is astonishing how long some people can go without an evacuation. There are authentic accounts of persons going as long as a month. Dysentery is a common result of constipation; depression of spirits is frequently concomitant. When the habit has existed for years, good results are obtained by nux vomica and belladonna combined with podophyllin. A glass of water with a teaspoonful of salt, an hour before breakfast, will almost surely act. Lately a drachm of glycerine injected into the bowel, is highly recommended. Great attention must be paid to diet. Fruit and vegetable will be found very effectual in keeping the bowels in a soluble condition. Patients of this class drink too little water, especially in the winter time. It can be seen at the first glance that the moisture of the intestines becomes absorbed and the remaining matter hard.

Universal Pharmacopæia.

Dr. Robert C. Kenner, Louisville, Ky., sends to Progress, August, 1888, a short article on this head. The International Medical Congress has shown how wide-spread is the desire for interchange of opinions. It is well known that when a student from this country goes abroad to study, he is only too often confused by the names and preparations he hears of and sees. If a congress should meet, consisting of representative men from the different important countries, to formulate a "universal pharmacopæia," we should have a book which would embody the excellencies of all. It would go a great way toward breaking down the real barrier in the way of making medicine an international science.

Cure for Dipsomania.

Dr. E. J. Kempf, Jasper, Ind., (Progress, August, 1888) treats it as follows: The patient must have the desire cured; second, he must not have the idea that he is a drunkard, but that he is a sick man; third, he must continue the use of alcohol in a temperate way, but no fancy drinks; fourth, he must take two grains of quinine daily before meals for six months, and then ten grains a week for the rest of his life; fifth, whenever the patient gets into a debauch, he must be given ten grains every four hours, in whiskey, until he becomes cinchonized; sixth, he must have better social relations, and induce him to avoid bad company.

Abortive Treatment of Gonorrhœa.

Dr. E. M. Wiley, Harroldsburg, Ky., publishes (Progress, August, 1888) a new method. It is generally admitted by all eminent pathologists that the disease is caused by the presence of gonococci, and as corrosive sublimate is a recognized germicide, it is applicable to such cases. The apparatus is simple and inexpensive. A fountain syringe, medium size catheter, glycerine for lubricating, five per

cent. solution of cocaine, and a hot solution (one to three or four thousand) of the sublimate. Introduce the catheter beyond the site of the disease; allow the fluid to flow slowly, thus washing all the parts of the urethra in its outward flow. If there is much inflammation, it is best to cocainize the urethra before commencing irrigation. The pain following the injection is quite severe for two or three hours, but can always be controlled by cocaine. The author then gives eight cases in which the disease was aborted in from one to three applications. In not a single case has stricture resulted, or the patient suffered from chordee.

Diseases of the Rectum.

Dr. Joseph M. Mathews, Louisville, Ky., reports (Progress, August, 1888) the advances in this branch as follows: Before doing a surgical operation upon the rectum, active purgation is employed three days previously. The morning of the operation the bowel is washed out with hot water, followed by carbolized water. A thoroughly aseptic sponge is pushed up above the prolapsed site of operation, to keep back the fæcal mass, and liquid portion from trickling down. The sponge is allowed to remain for two days and a half. In hæmorrhoids, the plan of injecting carbolic acid is fast losing favor among practitioners; the removal by incision is by far the most scientific way, and freest from danger. Fistulæ are readily split by Otis's urethrotome.

Dietetics in Typhoid Fever.

Dr. F. B. Bishop, of Washington, D. C., believes (N. C. Med. Jour., Sept., 1888) that overfeeding is as common an error in the treatment of typhoid fever as underfeeding. The alimentary canal is dry and parched, all secretions checked, and the dead epithelial scales make it hard and glossy; sensibility of nerve endings is obtunded—especially taste and smell—and the process of absorption is greatly lessened. Brunner's and Peyer's glands are swollen. Give milk, what does it do? It enters the stomach without saliva, and meets with little, if any, gastric juice. It remains unacted on for a time, and then passes into the bowel as an offending substance. Soon the bowels become filled with gas, and the abdomen tense. Curds become hard, and irritate the tender glands of the stomach and intestine, and cause pain. Tympanites, constipation, or diarrhea, fever, delirium, or coma, etc., result. Glycerine being one of the best solvents we have, softens the hard, dead epithelial scales

that are caked more or less throughout the whole alimentary canal. A teaspoonful of glycerine, given several times a day, soften the lips, etc., so that they can grasp the vessel that conveys the food, and the patient thereby does not gulp down such excessive quantities of wind. Then, also, what milk is taken is more readily absorbed, provided it is not taken in such conditions and quantities as to cause excessive fermentation. The doctor does not doubt that pure cow's milk is fine food for calves, but doubts if it is for babies or sick people. Koumiss is as nutritious, and the alcohol that has been formed in the process of fermentation, acts also as a good stimulant and tonic. Barley flour, made into gruel, mixed with an equal part of milk or, better still, with milk and Seltzer, makes a splendid food. We have also beef peptonoids, solid and liquid, which, when added to meat broths, make them very nutritious. But he advises the giving of more cold water or pounded ice than is usually given, and less food.

Exploring Needle in Diagnosis of Bone Disease.

Dr. Ap. Morgan Vance, Louisville, Ky., says in the American Practitioner and News, August, 1888, that he has not heard of the mention of the use of this instrument for the purpose until two years ago. He knows of no way in which to gain so much knowledge of the condition of the bone as by this method. The possibility of the needle being forced into healthy bone is a question that may arise. This has been tested on the bones of animals, with negative results—finding it impossible to make a delicate needle enter to any depth. In diseased bone the needle not only enters without resistance, but a feeling of grating, and again of the freedom of the point is felt. Sometimes the first evidence of disease is the presence of pus on aspiration (?) of the bone with hypodermic needle.

Care and Management of Insane in Texas.

Dr. A. N. Denton, of Austin, Texas, remarks (Daniel's Tex. Med. Jour., August) that in his State the government of asylums is changed or revolutionized with the advent of each incoming Governor. Not only is the Superintendent of the asylum changed, but generally the entire working force, leaving the institutions in the hands of inexperienced parties either in the care and management or treatment of the insane. During his experience as Superintendent, no lesson was more deeply impressed upon him than the ne-

cessity for a universal law of kindness in management. Physical restraint is scarcely required in more than one per cent of cases. Employment is one of the most useful adjuncts of treatment of the insane. Compulsion to work should never be insisted on. Example and persuasion are generally sufficient influences to persuade patients to accept employment. The average number of insane under one superintendency, should not exceed from 300 to 400. As a rule, only about one attendant is allowed to twelve or eighteen patients. This slim allowance requires a judicious sandwiching of the few acute cases with the quiet or convalescing cases.

The Drachm-Grain Plan of Prescription Writing.

If Dr. C. H. Merrick, of Washington Ter., says (South. Med. Rec., September. 1888) if he wants an eight ounce mixture, he writes thus:

Instead of R_f, write plainly 64, to indicate the total number of fluid drachms or teaspoonfuls in the prescription. Then write down in regular order the names of the several drugs of the prescription (indicated in the above

recipe by the letters A, B, C, and D). The numerals indicate the number of grains of each drug entering into a teaspoonful dose; thus, 10 grains of A, 15 of B, 6 of C, and 1 of D. After the apothecary has put in these ingredients, he is to add any suitable vehicle to make a total of 64 drachms, or eight ounces. [But without quoting the doctor any further, he either has his illustration "terribly mixed," or else his explanation is very poor. "Remember, figures to the left of a line or point express drachms, while those on the right express grains or minims." The whole thing leaves too much thinking, calculating and discretion to the druggist, instead of leaving any of these rights and privileges to the doctor.—Ed.]

Veratrum Viride for Puerperal Eclampsia.

Dr. F. M. Cushing reports (South. Med. Rec., September, 1888) two cases of puerperal convulsions successfully treated with veratrum viride, and remarks that he has "treated several like cases with the same happy result." He mentions the two dissimilar cases now reported to show that it does not make much difference whether the patients are

plethoric or anæmic—the successful result is the same. Strange to say, none of these cases he has had under this treatment, ever had any appearance of nausea. The medicine seems to quiet nervous irritability, calms the circulation, controls reflex action, and destroys or modifies the poisonous action of the uric acid upon blood or brain. The doctor could scarcely have been a long continuous reader of the medical journals, if he does not "recollect of ever having seen any account of it before he commenced" its use in puerperal eclampsia. He uses six or eight minims of Norwood's tincture hypodermically, combined or not with morphia. In addition, he gives potassium bromide and chloral, liberally.

Substitution by Druggists of Medicines Prescribed.

If there is a practice among any reputable pharmacists or druggists that should be denounced, it is that of substituting the manufacture of some other druggist for that which is prescribed. It is none of the business of the pharmacist or anothecary to dictate to the doctor what he should prescribe. If the honest apothecary has not the preparation the doctor has prescribed, and cannot supply it, it is simply and plainly his duty to say so, and not undertake to furnish a substitute without a free consultation with and the full consent of the doctor. What would the apothecary think of his stationery dealer if he were to send him a box of "Falcon pens" when he had ordered a box of "Spencerian pens?" Is it honest in the stationer to undertake to palm off the brand not ordered? And if the stationer were to establish it as the principle of his house to thus "work off" his stock on the pharmacist, would not that pharmacist soon say that he would discontinue dealing with that stationer, and furthermore, expose him to his friends? If this principle is regarded as dishonorable in so trivial a matter as the selection of a pen, it should certainly be held as more disreputable for the pharmacist to substitute a medicine not ordered for the one that is prescribed. . The apothecary concedes the whole thing when he says he supplies only Squibb's chloroform or Merck's antipyrin, etc., when those preparations are ordered. If he is honest in filling the prescription of the doctor strictly when these articles are prescribed, why should he not be equally as honest when the preparations of Wm. R. Warner & Co., or Sharpe & Dohme, or Parke, Davis & Co., etc., are prescribed? Is it not dishonorable in principle to do otherwise?

Our attention has been specially called to this disreputable practice of some apothecaries by perusal of the following letter. For the present, we withhold the name of the firm charged with the substitution, and simply use the dash, in the hope that this prominent mention of the subject will lead those pharmacists who indulge in substitutions to "mend their ways:"—

September 5th, 1888. MESSRS. WM. R. WARNER & Co., Gentlemen:—"I have your report of 3rd instant to hand, in which you say you have examined the pills and that out of 28 samples of those bought in — as W. R. Warner & Co.'s, only 8 were genuine; also that only 12 out of 20 samples bought in were made by your house. Those sent you from this city I bought in person and said I did not want any pill but yours, and would not take any other make, and even under those circumstances, all of the pills that I forwarded you were sold to me as your make. Those bought in — were bought by my daughter, an intelligent girl, and she impressed upon every druggist that only Warner & Co.'s pills would answer, and that she must not take any other make, every druggist sold her the pills as genuine. In view of the fact that physicians are alone responsible for the lives of their patients, I should think that they would agitate and expose through the medical journals the immense amount of shameful substitution going on and would see to it that their prescriptions should not go to those who are criminal enough to substitute one make of pills for another. The doctor, not the druggist, should be the judge of what his patients require. There must be some way of putting an end to this pernicious business."

Unique Double Anatomy in a Female.

Yours truly,

Dr. Lewis Whaley, of Blountsville, Ala., reports a most singular case of this kind (Atlanta Med. & Surg. Jour., Sept., 1888.) In the spring of 1887, Mrs. B., aged 19, married about a year, had not menstruated for two months. She had pain in her left side, and distressing nausea and vomiting, with loss of appetite except for certain articles of diet. She had headache and fever, and also pain above the pubis. She thought she had an abscess or a tumor there. To the doctor's great surprise, he found on examination that this patient had four inferior extremities, two sets of genital organs, external and internal, two pubes, two montes veneris,

H M. PINKARD, M. D.

two urethrea, two umbilices, two distinct sets of bowels and two aniboth genitals and bowels being entirely independent of each other. She had, until two months before, menstruated regularly from both genitalia. But sometimes one bowel would act when the other would not; sometimes diarrhea would occur from one bowel while the other bowel would remain constipated. A few weeks afterwards, the left abdomen became gradually enlarged. By digital examination and ballottement and by comparison of the two uteri, the enlargement was noticed to be in the left uterus. Pregnancy of the left uterus of about three months duration was at length diagnosed. Drs. Haden, of Summit, and Aldridridge, of Brooksville, confirmed this diagnosis after careful examinations. It being anatomically impossible for her to give birth at full term (as the pelvic outlet was only two inches antero-posteriorly and 11 laterally), abortion was produced by introducing uterine sound and giving ergot. She gave birth to a feetus 3½ months old. Her recovery was rapid and complete.

Book Antices.

Illustrated Encyclopædic Medical Dictionary. Being a Dictionary of the Technical Terms Used by Writers on Medicine and the Collateral Sciences in the Latin, English, French and German Languages. By FRANK P. FOSTER, M. D., Editor New York Medical Journal with Eleven Collaborators. Vol. I. With Illustrations, New York: D. Appleton & Co. 1888. Royal 8 vo. Pp. 752. Leather. (From Publishers. Sold only by Subscription)

This magnificent work exceeds any expectations we had formed from the advertisements of what it would be. It surpasses any medical dictionary published in any of the languages. With this dictionary at hand, there will be no need for another for some years to come; for it includes every medical word that occurs in any dictionary of any living language, as well as those to be found in Greek and Latin lexicons. It also includes very many, if not nearly all medical words that have been introduced in recent years through the medical journals that have not yet found their way into any other medical dictionary. Not only does it give all the words used in medicine and the collateral sciences, with carefully prepared definitions, but it also gives the etymology and pronunciation of each word. Synonyms

are profusely stated. In short, all that can justly be looked for in a medical dictionary is to be found in this work. The book is handsomely gotten up, with durable binding, and the type is well selected for ready reference and easy reading. This dictionary at once becomes one of the indis-

pensables to the student and the practitioner.

Dr. Foster has been very fortunate in his selection of collaborators. They are Wm. C. Ayers, M. D., of New Orleans; Edward B. Bronson, M. D.; Charles Stedman Bull, M. D.; Henry C. Coe, M. D., M. R. C. S., L. R. C. P.; Andrew F. Currier, M. D.; Alexander Duane, M. D.; Henry J. Garriques, M. D.; Charles B. Kelsey, M. D.; Russell H. Nevins, M. D., each of New York city; Simon H. Gage and Burt G. Wilder, M. D., of Ithaca, N. Y. Dr. H. N. Vineberg, of New York city, is also credited in the Preface with "assistance in the revision."

Vol. I includes all words that can be alphabetically arranged between the letter A and Cacostomus. Since only pages 740–752 are taken up with the words from C to Cacostomus, it seems to us that it would have been a preferable arrangement to have included in this Volume only the words that can be alphabetically arranged in A and B, and have begun Vol. II with the letter C. In other words, let each Volume end with all words of one letter, and begin new Volumes with the succeeding letter of the alphabet. The dictionary will be completed in four other Volumes, to be issued in as rapid succession as the perfection of the press work, etc., will allow—perhaps from three to four months apart.

Modern Treatment of Diseases of the Liver. By Prof. DUJAR-DIN-BEAUTNETZ, of Paris, France. Translated from Fifth French Edition by E. P. HURD, M. D., of Newburyport, Mass. 1888. George S. Davis. Detroit, Mich. 12mo. Pp. 185. Paper. Price 25 cents, or \$2:50 per Annual Series.

This useful work to every general practitioner is the second number of Annual Series III of "The Physicians' Leisure Library." Its title represents the character of lhe publication. It is thoroughly clinical so far as the points of diagnosis and directions as to the details of treatment are concerned. Descriptive notes are made of cholagogues, how they are best prepared for administration under varying circumstances, etc. The pathological conditions and diseases for which the best plans of treatment are detailed are biliary lithiasis, jaundice, hepatic engorgements, inflammations of the liver, and hydatid cysts.

Intubation of the Larynx. By F. E. WAXHAM, M. D., Professor of Otology, Rhinology and Laryngology, College of Physicians and Surgeons of Chicago, etc. Charles Fraux. Chicago, Ill. 1888. Demi 8 vo. Pp. 110. (From Publishers.

This monograph is dedicated to Dr. J. O'Dwyer, in a sentence giving full recognition of the imperishable honor due him of making the operation of intubation one of practical utility to the profession. An impartially fair history of the operation is recorded, and the anatomy of the larynx is given in detail. Full directions are written out for performing intubation with a statement of the proper after treatment in almost every emergency. A record of cases illustrative of its value is made. The concluding chaptes is devoted to a consideration of the comparative value of intubation and tracheotomy, which shows in favor of intubation. Well executed wood cut engravings, mostly from Gray's Anatomy, are numerous and greatly aid the descriptive text. Intubation requires great dexterity and much practice in order to become expert. This should suggest the propriety to some surgeon in each community to make himself fully equipped and thoroughly trained to do the operation.

Diseases of the Heart and Circulation in Infancy and Adolescence. By JOHN M. KEATING, M. D., Obstetrician to Philadelphia Hospital, etc., and WM. A. EDWARDS, M. D., Instructor in Clinical Medicine and Physician to the Medical Dispensary in the University of Pennsylvania, etc. Illustrated with Photographs and Wood Engravings. Philadel-delphia: P. Blakiston, Son & Co. 1888. 8vo., pp. 215. cloth. Price, \$1.50. (For sale by West; Johnston & Co., Richmond.)

The matter of this book is already familiar to the subscribers of that journal which all general practitioners should take, the Archives of Pediatrics. But in the republication in book form of the serial articles which appeared last year in that journal, the authors have availed themselves of the opportunity afforded to make corrections and to add fuller notes where such seemed proper. We do not know of any other one book on the subjects named in the title. While the present work is thoroughly systematic, and thus serves well the purposes of a text-book for a college or private student, it is at the same time sufficiently clinical in its nature to furnish notes of many illustrative cases that have come under the notice of the authors. As an aid to the study of the pathology and diagnoses of cardiac diseases, it is the more valuable because of the many photographic and accu-

rate wood engravings made from specimens and from living subjects. In therapeutics, it is likewise full of useful suggestions based upon personal experiences or else upon the affirmations of clinicians whose authority is eminent. While the nature of our book-notices does not allow us an opportunity to enter into critical reviews, we feel that we will accomplish a valuable service if by this notice we induce our readers generally to secure and study the contents of this almost unique work.

Excessive Venery, Masturbation and Continence. By JOSEPH W. HOWE, M. D., Late Professor of Clinical Surgery in Bellevue Hospital Medical College, etc. New York: E. B. Treat, 1888. Demi 8vo. Pp. 300. Cloth. Price, \$1.75. (From Publisher.)

This is a work of great practical importance to physicians generally. The morbids conditions growing out of excessive venery or masturbation or, on the other hand, continence are so commonly met with, and the books on these subjects are so few that any help is oftentimes valuable to the doctor. Here we have a good practical description and discussion of the various points raised under the heads, etiology, pathology and treatment of diseases resulting from venereal excesses, masturbation and continence. vice as to treatment is generally good. But we are surprised to see that, in regard to damiana, the author is unable to express an opinion as he has not used it. By this omission in his practice, he has neglected a really valuable aphrodisiac, when such an agent is needed. However, so many other valuable prescriptions and such generally good advice for the treatment of the classes of diseases referred to are given that we commend this as an excellent book for the practitioner.

Manual of General Pathology, Designed as an Introduction to the Practice of Medicine. By JOSEPH FRANK PAYNE, M. D., Oxon., F. R. C. P., Physician and Joint Lecturer on Pathological Anatemy at St. Thomas Hospital, etc. With 153 Illustrations. Philadelphia: Lea Brothers & Co. 1888. 8vo. Pp. 524. Cloth. \$3.50. (From Publishers.

This very handsomely issued work must undoubtedly soon become familiar to medical students as their text book, while physicians who desire to keep abreast with advances will adopt it as their book of information. Payne's Pathol-

ogy is intended as an introduction to the practice of medicine. In short, it brings together two closely dependent branches of medical science which have all along been improperly taught apart. Part I is taken up with descriptions of the processes of disease, and Part II with the causes of disease. In this Part II, after chapters on the effects of mechanical and physical injuries, the action of poisons, ferments, animal poisons, vegetable ferments, septic and cadaveric poisoning, specific morbid poisons, etc., the causes of a number of special diseases are fully described. Among these are the acute specific fevers, or exanthemata, as also typhos, typhoid, Asiatic cholera, etc.; then the specific inflammations, as diphtheria, erysipelas, certain forms of dysentery, hydrophobia and even tetanus are taken up; next comes the causes of contagious suppurations, as gonorrhea, pyæmia, etc. The causes of granulation tumors and allied diseases are described, such as tubercle, syphilis, leprosy, glanders and farcy, anthrax, etc.; and finally the causes of the miasmatic diseases, etc. It is just the book needed at this time for information by a large class of doctors who want to know what has been established by recent researches.

Theory and Practice of the Ophthalmoscope. By JOHN HERBERT CLAIBORNE, Jr., M. D., Instructor in Ophthalmology in New York Polyclinic; Clinical Assistant in the Vanderbilt Clinic (Department of Ophthalmology); Attending Surgeon to North Western Dispensary, Eye, Ear and Throat Department, etc. 1888. George S. Davis, Detroit, Mich. 12mo. Pp. 77. Paper. Price, 25 cents.

This is No. 5 of Series III of the "Physicians' Leisure Library," so often commended to the favorable consideration of our subscribers. The merit of this essay or monograph does not fall below that of any of its predecessors. The author does not lay claim to originality of discovery or invention; but his descriptions are so accurate and intelligibly made that this publication very well meets its design—that of being a hand book for students. As differing from most teachers, Dr. Claiborne recommends the "Reflected Method" of illumination for examining eyes, instead of the "oblique illumination." The reflected illumination shows all that can be discovered by the oblique method, "and more besides." He thinks retinoscopy is not sufficiently used in this country. A chapter is added on mydriatics, for convenience of reference. He speaks especially of co-

caine hydrochlorate as a mydriatic of special value where it is not intended to affect the power of accommodation. When the power of accommodation is to be paralyzed, nothing equals atropia sulphate. Dubois is good but too expensive.

This is Dr. Claiborne's first book form publication, although being one of the editors of Gaillard's Medical Journal, now being so ably edited, most of our readers are already familiar with his writing. If his ambition lie in the direction of becoming an author of fame, this essay indicates that he would prove a great success. This book is copiously enough illustrated with woodcuts, etc.

Editorial.

Medical Society of Virginia-Announcements, Etc.

The official Announcement of the Nineteenth Annual Session of this Society was duly issued by the Executive Committee. As supplemental to information in that Announcement, we add the following items which have been

received from the Recording Secretary's office.

The session will convene at 8 P. M., Tuesday, October 23, 1888, in the Hall of the Young Men's Christian Association, located on Main street, on the line of the City Railway, near the corner of Granby street, in Norfolk, Va. The Pharmaceutical and Surgical Exhibition rooms will be in the New Atlantic Hotel, about a half a square or block distant.

Since the issue of the Announcement, information has been received of the preparation of papers etc., as follows:

Honorary Fellow Dr. John Herbert Claiborne, of Petersburg, Va., announces a brief paper on the subject for General Discussion—Atypical Forms of Typhoid Fever. It will be remembered that Prof. Wm. C. Dabney, M. D., of the University of Virginia, is the leader in this discussion. Dr. Wm. L Robinson, of Danville, Va., has already announced a paper on this subject to follow that of Dr. Dabney.

For the "Section on Practice of Medicine," a letter dated September 4th, from Dr. C. D. Lewis, of Clifton Forge, Va., announces a paper on "The Treatment of Typhoid Fever." This letter was received on the day of the issue of

the Announcement (Sept. 20th), and had been missent to another postoffice. The date of Dr. Lewis' letter entitles his paper to the third position in this section. By letter dated September 20th, Dr. R. C. Powell, of Alexandria, Va., announces a paper, also for this section, on "The Etiology of Febrile Pyrexia in the Light of Modern

Physics."

In the "Section on Surgery," the Reporter, Dr. W. Edward McGuire, of Richmond, Va., will limit his paper mostly to "Pathogenic Germs and Conditions Relating to Infection." Dr. J. P. Roy, of Richmond, Va., will present the Report on Advances in Genito-Urinary and Orthopedic Surgery. Honorary Fellow, Dr. Hunter McGuire, of Richmond, Va., has changed the title of his paper (announced in the circular under this section) to "The Formation of an Artificial Urethra in Prostatic Hypertrophy," a subject in which he has been greatly interested for some time past, and in which he has made some original investigations. Dr. Milton Josiah Roberts, of New York City, an Invited Guest, will present a paper on "The Treatment of Spinal Diseases and Deformities by Means of the Woven Wire Corset, with Report of Cases and Exhibition of Apparatus."

In the Section on Ophthalmology, Otology and Laryngology, the Reporter, Dr. Alfred C. Palmer, of Norfolk, Va., has appointed Dr. John T. Francis, of Norfolk, Va., to assist him in making a Report on Diseases of the Ear and

Throat."

We regret exceedingly that the above Announcements were not received in time for distinct statement in the Circular issued by the Executive Committee. Postal requests were sent to the Fellows for such information about August 20th, but, unfortunately, some of the Fellows did not re-

spond in time.

From indications at the time of going to press, the Session this month in Norfolk will be a great success. The profession of that city has done everything in its power to secure a successful meeting. Dr. Alex. Tunstall, Chairman of the Local Committee of Arrangements, and Dr. W. H. Shepherd, Chairman of the Committee on Routes, Accommodations and Rates, etc., have done their respective parts well. Applications for Fellowship are also coming in encouragingly. In short, this promises to be a session of more than usual interest and importance.

As to rates of travel, etc., the following additional information has been received from certain of the lines:

Atlantic Coast Line—From Richmond to Norfolk and return, via Petersburg, \$3.50 round trip. This is the same rate as over the Chesapeake & Ohio via Newport News.

Seaboard and Roanoke R. R. Time has been extended so as to put tickets to Norfolk on sale October 20th-25th, in-

clusive, good to return until 29th.

Atlantic and Danville Railway. Round trip to Norfolk and return, from October 22d to 29th, inclusive, will be the fare one way from all points on that line. All interested in rates over this line should remember that they should receive from the Secretary of the Society certificates showing that they are entitled to this rate, which will be accepted by the Conductors on the trains for their return trip—each

Fellow paying full fare to Norfolk.

Baltimore and Ohio R. R Every one in Virginia proposing to attend the session in Norfolk, who has to travel over the branches of this railroad, either to Washington or Staunton, should at once write to Dr. Landon B. Edwards, Secretary, etc., Richmond, Va., for reduced rate orders, and should say how many orders he wishes for other doctors or members of their families. Although attention was called to this matter in the Announcement, none of the blank orders in the hands of the Secretary have been distributed, simply because he does not know to whom to send them. Inform him by postal at once.

The Yellow Fever Epidemic,

Now prevailing in certain sections of our Southern States, has undoubtedly been a much more serious matter than the reports in the newspapers would indicate. Exactly where the disease is prevailing and where it is (of course with a few prominent exceptions) is not definitely known by the general public. Cities, towns and villages in various parts of the South are establishing or have established all sorts of quarantine regulations—some against other cities known or supposed to be under infection, and some against the whole outside world. The "shot-gun system of quarantine" seems to be very common, so as to prevent man, woman or child, baggage or freight of almost every description, from landing at certain places or depots along the lines of railways. Cordons of armed pickets guard the avenues of ingress and egress of towns and cities; and it seems to be about as hard to "run the blockades" as it was in Confederate times for vessels to enter or leave the blockaded

Southern ports. We doubt if ever before in the history of this country so thorough a "from town to town" quarantine was adopted. Mail matter alone seems to be permitted to pass in and out; but every letter or package leaving an infected place has first and last to be fumigated with sulphurous gases, etc. As travellers coming into Richmond and leaving it are under no quarantine restrictions, because there is no apprehension that a yellow fever epidemic will ever scourge our city, we do not appreciate the terrible distress and business interruption caused by quarantine until some party who has run the gauntlet down South, tells of the difficulties encountered and the bardships endured because of the quarantine system. These quarantines are necessarily very expensive, and the burden of cost falls mostly upon a people who are by no means wealthy. seems to us that the National Government, in seasons like the present one—now nearly over—should make ample pecuniary appropriations at least to relieve the impoverished States of so heavy an expense. Travelling expenses of citizens in infected places and camps of refuge should be well sustained by the General Government so as to entice people to leave infected cities and towns—those who cannot leave unless their expenses are borne by others than themselves. No doubt, this winter we shall have full reports from those now too busy to write.

Our November Number

Will not be issued as early in the month as this October number, for the reason that we hope to give in it a full report of the Proceedings of the Medical Society of Virginia during its session October 23d-26th. These proceedings promise to be of interest enough to justify a little delay in issue in order that they may appear in our November number.

Medical Examining Board of Virginia.

We are glad that the Journal of the American Medical Association, of September 8th, editorially reviews the record of this Board up to a recent date, and very warmly commends its labors to the consideration of the profession. It advocates the establishment of like Boards in other States, and shows, by an analysis of the Reports of the Virginia Board, what good has been done the profession. It naturally drifts upon the influence of such Boards in leading to a higher education by the Medical Colleges of this country, and se-

verely reflects upon the conduct of those connected with a college who oppose the effort of the profession to bring about a higher standard for medical graduation. Many sensible, strong points are made in that editorial which we

regret not having space to reproduce in our pages.

In the issue of this official organ of the American Medical Association for September 22d, we find a cordial approval of the editorial referred to by Dr. William Osler, of Philadelphia, an eminent Professor in one of the Philadelphia Medical Colleges. With reference to the Report of the Medical Examining Board of Virginia, he correctly says: "To the schools, such a report is as the handwriting on the wall, "Mene, mene, tekel upharsin;" to the profession of every State, an encouragement to persevere in the good work of organizing Medical Boards." "It is not a function of the University to grant the license to practice. That the M. D. degree carries this privilege is a modern usurpation, which does not extend to degrees in other faculties. It is a function of the State, to be exercised either directly, as is done in Germany, or indirectly by the profession organizing and appointing suitable examiners. The struggle is between the colleges and the profession; and I would refer any one who may feel doubtful as to the issue of the fight to an address which I delivered in 1885, when President of the Canada Medical Association, in which I sketched the organization of the profession in the Provinces of Ontario and Quebec, which led, in the former Province, to the com-* * * "I feel conplete subjugation of the schools." vinced that the future of medical education in this country lies largely in the establishment of State Boards, such as exist in Virginia and North Carolina, which (1) control the entrance examination, (2) regulate the curriculum, and (3) grant the license to practice."

Such sentiments expressed by those practically possessed of authoritative utterance go far to encourage the organization in other States of Medical Examining Boards similar to those in Virginia and North Carolina. They also help to encourage the profession in these two States to keep their Boards up to the high standard of excellence to which they have attained. There has been nothing in the conduct of the Virginia Board—nor, as to that matter, in the North Carolina Board—to cause the profession to regret their selection of its members. With very rare exceptions, the few objectors to the Virginia Board are easily tracked to connection with or personal interest in some medical college.

But the great majority of the profession of this State stand as supporters of its Board, and would be glad if its present composition could be retained for the next four years. The present membership have stood the brunt of a hard-fought battle against the prejudices of some and the self-interest of a few others, but have come out victorious; and now it is but a justly deserved recognition of their services that they should be complimented by re-election during the approaching session of the Medical Society of Virginia for the succeeding term of four years.

Messrs. R. A. Robinson & Co., of Louisville, Ky.,

Have sent us a box containing several of their elegant preparations, with the request to put them to a thorough test. They have met with much favor at the hands of the profession generally in other parts of the country, and hence we had no hesitation in complying with their request, so far as opportunity allowed. We have used their Lime Juice and Pepsin, their Elixir Paraldehyd and their Colorless Hydrastis (fluid) with very great satisfaction, and will continue to use them as occasion may justify their prescription. Their other preparations (advertised in this journal) have the highest endorsement of practitioners of ability. This firm was established forty-five years ago, and has been continuously enjoying a widening reputation as a sound, honest and reliable business-house.

Purcell, Ladd & Co.'s Syrup Hypophosphites Compound,

The article contributed to this issue by a "Fellow of the Medical Society of Virginia" does not, in any particular, overstate the virtues of this preparation as a tonic or reconstituent. Now that the season is at hand when windows are shut, doors closed, and heated stoves or furnaces are consuming the oxygen in the rooms, bringing on wasting diseases, with loss of appetite and loss of digestive power in the pent-up victims, this reconstituent preparation of Messrs. Purcell, Ladd & Co. should be freely prescribed. The composition of this Syrup of Hypophosphites Compound is given on the label around each bottle, as well as in the advertisement of the firm in this journal. This Syrup is freely enough prescribed by the best practitioners of this community to indicate their approval of its claims as to its virtues, so well set forth in the article in this issue. We hope our readers everywhere will give their patients needing such an agent the benefit of prescriptions for it.

Prevention of Consumption.

Dr. Ferdinand Seeger, editor of Medical Classics, has an article in the October number of his popular medical journal on this subject which traces the disease in great measure to a damp subsoil. Dr. Simon notes that in 15 English towns the consumptive death rate fell immediately when the subsoil was dried by drainage. In Salisbury, the deaths fell 49 per cent.; in Ely, 47 per cent., etc. Proper ventilation, too, is pointed out as a preventive. The high deathrate from consumption among the Guards of the British army fell from 125 in 10,000 in the year 1858 to 16.9 in the year 1875, because of improved ventilation of barracks, etc. The researches and data of Dr. Bowditch, of Boston, Buchanan, of England, Pepper, of Philadelphia, all strongly confirm the conclusion that the comparative degree of wetness in the soil is a fair measure of the proportion of consumption among the residents about such places. The hereditary nature of the disease is almost universally admitted, while the doctrine of its development by infection is receiving more general recognition. As to race, the negroes are most liable to the disease, and the Jews are the most exempt. But Dr. Seeger emphasizes the statement that it is dampness and want of ventilation that make a house or group of houses dangerous; and they probably do this, in large part at least, by causing or promoting slight inflammations of the air passages, sore throats, bronchitis, etc., which lower the vitality of tissues and so make them fit to support the tubercular bacilli.

These remarks are so correct, according to our observation, that we regret not having room to publish the article in full. Streets in our city that were once as seriously affected as other parts by consumption have now become almost entirely freed of the disease because, by dint of urgency on the part of family physicians, care has been taken by the owners of houses to see that their cellars are well drained and their houses ventilated in keeping with advances in sanitary science. But on other streets, where the houses are built more with reference to storage purposes—where the dampness of the cellars and proper drainage have not been considered—where the common-sense principles that should prevail regarding ventilation are not practised—where parties are permitted to live or even to room in such houses there we may look for the development of consumption, especially if there be the hereditary tendency.

Dr. Seeger has done good work for sanitary science in

calling attention to the surroundings of many so-called "health resorts," which expose the fact that some of them should rather be known by the patronizing public as disease-developing places, and of course should be avoided until the cellars and soil are properly drained, and the houses built with reference to very materially improved ventilation.

The Congress of American Physicians and Surgeons,

Which met in Washington, D. C, during September, was a great success, notwithstanding the complaints made against the Potomac water, and against the high charges and bad fare of some of the "prominent Washington hotels." We regret not having space in which to make reports of the proceedings of the several National Societies which together formed the Congress.

The Liebig Labaratory and Chemical Works Co.

Begin a two-page advertisement in this issue, which we hope will attract the favorable attention of our readers who may be called upon to prescribe such articles as they advertise. In regard to the Liebig Company's Coca-Beef Tonic especially, we have been greatly pleased with it. It gives us pleasure to find our views confirmed by Dr. J. C. Le Hardy, of Savannah, Ga., who, in a recent issue of the New York Medical Journal says: "The want of a pleasant, nourishing and easily assimilated tonic, containing as little alcohol as possible for its preservation, has always been a desideratum in our Southern climate, where dyspepsia or results of torpidity of the liver and of abuse in diet is very prevalent. For this reason I hail with pleasure preparations which may prove a relief. . . . I selected three cases of chronic dyspepsia, where the assimilation of food was defective, loss of weight, etc. The results obtained in two weeks were indeed surprising; one patient gained five pounds in weight, another three pounds, and the third one about the same."

New Edition of the United States Dispensatory.

The J. B. Lippincott Company, of Philadelphia, Pa., announce that a new edition of the United States Dispensatory is now being bound, and will be ready in a few days. The revision has been thorough, and not merely the addition of a supplement. More than one-third of the book, or nearly eight hundred pages, is entirely new matter, while the whole work has been most carefully re-written. The National Formulary has been incorporated.

Southern Surgical and Gynecological Association.

The meeting of this Association was not held in Birmingham on the 11th-13th of September as announced, but has been postponed till the first Tuesday in December, owing to quarantine against yellow fever. Members are requested to signify whether they can attend the meeting in December. Address W. E. B. Davis, M. D., Secretary, Birmingham, Ala.

The New York Post-Graduate Medical School and Hospital.

According to Dr. J. M. Hays (N. C. Med. Jour., Aug.) presents a course that is in some respects, equal to any in Europe, and specially adapted to the wants of the busy practitioner who has but a few months to spare from his work at home in which to acquaint himself with the most recent improvements in medical science.

Buffalo Lithia Water in Uric Acid Diathesis.

The correspondent of the North Carolina Medical Journal, August, 1888, in a very interesting letter about some New York celebrities remarks that Buffalo Lithia Water is Dr. Wm. A. Hammond's favorite treatment in the uric acid diathesis. If this treatment were dependent upon authority for its recommendation, we know of none so able as Dr. Hammond in such matters. But daily observation is bringing it under frequent demonstration that the continuous use of Buffalo Lithia Water—used to the exclusion of all other drinking water—is the treatment of the uric acid diathesis and its long train of sequelæ.

Dr. C. P. Wertenbaker

Has recently been appointed by the Secretary of the Treasury, on nomination by the Supervising Surgeon General U. S. Marine Hospital Service (Dr. J. B. Hamilton) an Assistant Surgeon in the Marine Hospital Service, and assigned to duty at Norfolk, Va.

Lactated Food.

The Wells & Richardson Co., of Burlington, Vermont, begin a new advertisement in our pages this month to which interest is given because it was the infant food upon which the triplets were fed that gained President Cleveland's prize for the best three babies at Aurora county Fair in 1887. A cabinet size photograph of these triplets will be sent to any of our readers who mentions the Virginia Medical Monthly

in his request. A regular size package of "Lactated Food" will also be sent charges paid, to any physician who is not yet acquainted with its merits.

The Maryland Eye and Ear Infirmary

Has furnished medical and surgical attention to our fifty thousand sufferers from eye and ear diseases during its twenty years of existence. It is a charitable institution for the poor and needy only, established by Dr. George Reuling, in Baltimore, Md., in October, 1888, who is still surgeon in charge. Nearly every one of the patients have been examined and treated by Dr. Reuling in person. Few medical charities in this country have exceeded the record of good done by this one institution. A new building has just been occupied as the Infirmary, connected with the Baltimore Medical College, in which Dr. Reuling is Professor of Eye and Ear Surgery.

Medical Examining Board of Virginia,

Secretary's Office, Charlottesville, Va., Oct. 1, 1888.

The members of the Medical Examiners Board of Va., will meet in regular session in the city of Norfolk, at 6

P. M., Tuesday, October (current month) 23rd, 1888.

A full attendance is desired to close up the work of the present Board, as a new Board will be elected and nominated to His Excellence the Governor, at the coming session of the State Medical Society, which convenes at the same time and place.

The Chairman of Sections will please have full sets of

Examination Questions on hand.

Applicants for permission to practice medicine and surgery in the State will present themselves punctually at 9 A. M., Wednesday morning, 24th instant.

By order
H. Gray Latham, M. D., President.
Official Hugh T. Nelson, M. D., Sec'y and Treas.

Mellier Drug Co.'s Peptonic Elixir.

The problem of a thoroughly satisfactory liquid pepsine has been solved by the Mellier Drug Company, who can guarantee in presenting their peptonic elixir (elixir-pepsiniacidi) that this preparation contains more peptonic strength than any other in a liquid form. It is exceedingly palatable and much cheaper than other similar ones. Attention is called to their advertisement and their offer to send a

bottle of the regular size to the address of any physician, applying for same, who will agree to pay express charges on the package.

Bbituary Begord.

Dr. B. F. Cobb,

A note of whose death, on August 24th, we made in our September issue, was a member of the Richmond Medical and Surgical Society. This Society was in vacation until September 13th. During the meeting of that date, Dr. Cobb's death was reported. Drs. L. B. Edwards, W. B. Gray and Hugh M. Taylor were appointed a committee to make a suitable record of the sentiments of the Society. This committee presented the following:

"Your committee, in performing the duty assigned them of recording the death, on August 24th, 1888, of one of our oldest members, Dr. Benjamin Franklin Cobb, of this city, recognize the loss which this Society has sustained of a strong friend, an upright man and a good physician.

"Resolved, That a page of the Record Book of this Society be set aside for a proper sketch of the life work of our de-

ceased member.

Resolved, That we join with those who have extended their sincere sympathies to the family now bereft of a devoted and provident husband and father.

Dr. H. Singleton Belt,

Died at his home in Pittsylvania county, Va., August 27. He was a Fellow of the Medical Society of Virginia. As we go to press, we have not been able to learn the particulars of his death.

Dr. James D. Galt,

Died at his brother's residence in Norfolk, Va., September 10th, 1888, aged 57 years. He was a native of Norfolk county, Va., but resided in the city of Norfolk the greater part of his life. After serving as Assistant Surgeon in the Confederate Army for the four years of the War, he returned to Norfolk city where he resumed the practice of medicine and so continued until his death. He was for several terms physician to the Norfolk city Almshouse, City Coroner, and Health Officer. He was a Fellow of the Medical Society of Virginia from 1871 until his death.

VIRGINIA MEDICAL MONTHLY.

VOLUME XV—No. 8.

WHOLE NUMBER, 176.

RICHMOND, NOVEMBER, 1888.

Priginal Communications.

ART. I.—Surgical Kidney.* By HUGH BLAIR, Ex-President Virginia Pharmaceutical Association, etc., Richmond, Va.

Pyelitis, pyonephrosis, pyelo-nephrosis, pyelo-nephritis, from $\pi \nu \varepsilon \lambda o \zeta$ an oblong vessel, and $\nu \varepsilon \psi \rho \delta \zeta$, the kidney.

Pyelitis is inflammation of the pelvis of the kidney. If the ureter be obstructed and the exit of urine be prevented, we have a tumor (hydronephrosis); when the pus of pyelitis

is added to this there is pyonephrosis.

Pyelo-nephrosis, pyelo-nephritis and consecutive-nephritis are terms applied to the disease more commonly known as "surgical kidney." We exclude from consideration multiple abscess of pyæmic origin. Surgical kidney is by no means the exclusive result of the use of instruments, but it has so often followed instrumentation, especially catheterization and lithotrity, that the term has asserted itself into conventional usage. In 1873 the Emperor Louis Napoleon died of surgical kidney following lithotrity, and as a consequence the attention of the medical centres was directed to the disease, and its pathology was investigated.

Surgical kidney is always the consequence of extension

^{*}Read before Richmond Medical and Surgical Society, October 11, 1888.

of irritation or inflammation from the lower urinary passages.

Dickinson says that "of all renal disorders, next to the varieties of albuminuria, this is the most destructive to life. It may almost be said to form the natural termination of stricture of the urethra, and is the especial danger which attends the use of the catheter and lithotrite." Another authority says "it constitutes the most frequent termination of all urinary cases."

Surgical kidney is characterized by the presence of abscesses scattered through the renal structure, and these abscesses are associated with abundance of micrococci, disseminated and in colonies. Many of the tubules are crowded with micrococci.

For the purpose of this paper this is enough to say without repeating the extended description of the morbid anatomy found in the books, except to say, that "the changes in the kidney vary from the most chronic productive inflammation to an acute suppurative process."

These micrococci are the cause of this disease. A good deal has been written in explanation of the way by which the micrococci gain access to the kidney. All writers, however, are agreed that it is by extension. Beck calls the disease "consecutive nephritis," because it is consequent upon inflammatory disorder of the organs below the kidney.

Green says: "Though very often the urine in the pelvis of such kidneys is septic, it is not necessarily so." Dickinson is of a different opinion. He says: "I have myself known no instance in which the mischief has arisen except in connection with ammoniacal urine." "The urine was generally feetid and more or less mixed with vesical products—pus, mucus and blood. There is reason to believe it was invariably ammoniacal."

Hoffman and Ultzman say: "Microscopically, are found in the urine, besides numerous bacteria, molecular detritus and kidney epithelium, and not seldom beautifully formed, thick, often branched cylinders, which are formed of bacteria (pyelo-nephritis parasitica.—Klebs). If it is complicated with parenchymatous nephritis, we find also dark, gran-

ulated, mostly thick cylinders from the straight tubules.' But no chemical or microscopical examination is sufficient alone to diagnose surgical kidney. Such an examination is quite competent, however, to put the physician on his guard, by ascertaining the existence of the pathological condition which may precede this disease. The symptoms are very pronounced—chill, fever, and then the typhoid condition, with utter prostration, and then the end. Mr. Erichsen has well described the disease under the heading of cystitis (the disease was not then differentiated). He says: "This chronic form of inflammation of the bladder is not unfrequently fatal, death resulting eventually with symptoms of a typhoid character; the tongue becoming brown and the pulse feeble, and these are usually associated with urinary poisoning of the blood, the mental manifestations becoming dull and obscured, and the body emitting a strongly urinous odor, and the skin a dense clammy sweat."

Dropsy is never a symptom. The duration of this disease

may be from two days to three weeks.

Surgical kidney may be consequent upon any lesion that obstructs the natural flow of the urine—upon paralysis affecting the bladder, upon calculus, upon cystitis from any cause, especially as connected with enlarged prostate or stricture of the urethra. But it is understood that in all cases the immediate cause is the introduction of septic matter known by the presence of micrococci.

The treatment is the same as the treatment of pyæmia with the addition of such local attention to the bladder as is necessary to keep the urine in an aseptic non-alkaline condition.

There is no way to apply antiseptics directly to the kidney; if there was surgical kidney might be more amenable to treatment. But we have reason to suppose that antiseptics may reach the kidney through the circulation. We know of two cases in the practice of Dr. Hunter McGuire, in which intractable pyelitis (probably not far away from surgical kidney,) were wonderfully (one of them certainly) relieved by a sojourn at the Sulphur Springs. No doubt the mountain air exercised a beneficial influence, but it is

reasonable to suppose that the saturation of the body with sulphuretted hydrogen and the frequent direct contact of the same with the diseased kidney were very unfriendly, not to say destructive, to all forms of bacteria. Perhaps the same recourse may be useful in preventing, if not healing, surgical kidney.

We conclude what we have to say in the words of one of the authors already quoted, wherein one of the most prominent facts connected with the disease is emphasized. "The disorder in its frequency and fatality has great practical importance. Inflammation of the bladder, or of the pelvis of the kidney, either as antecedent to the change, or associated with it, is so invariably present as to give a seemingly warrant to the old view which regarded the disease as a mere extension by contiguity of inflammation beginning in the urinary cavities. The nature of the organic change, however, plainly declares its origin, not in the mere creeping of inflammation from membrane to gland, but in absorption of morbific matter. Of this the urine is obviously either the source or the vehicle.

As connected with this subject a new operation proposed and practiced by Dr. Hunter McGuire promises relief in certain cases usually attended with constant torture, and winding up with surgical kidney and death. We mean such cases as irremediable stricture of the urethra, and, more especially of enlarged prostate, where urinary obstruction exists to that extent that the use of the catheter is very frequently or constantly necessary. It is not necessary for me in this presence to describe the agony and hopeless condition of such patients.

Dr. McGuire, by supra-pubic operation, effects a permanent fistula of the bladder, better say an artificial urethra. The operation is now and as yet must be experimental. The patients upon whom the operation has been performed, however, have recovered their health remarkably, are able to attend to their occupations, have fattened and have found relief from their sufferings to that extent that one of them remarked that he was as near Paradise as he ever expected to be.

Clinical Reports.

Case of Puerperal Fever without Evidence of Septicæmia, with Remarks. By EUGENE L. CRUTCHFIELD, M. D., Member of the Baltimore Medical Association, etc., Baltimore, Md.

The majority of the authorities on obstetrics, I believe, consider puerperal or child-bed fever to be a septic disease, always produced by the absorption of infectious material. This may be the result of decomposition of coagula, of fragments of the membranes, or of pieces of the placenta that the contractions of the womb have failed to expel. In this case, the disease originates within the genital tract of the woman; hence it is called autogenetic. On the other hand, the poisonous germs may be conveyed by the physician, the midwife, or the nurse of the patient. It is then designated heterogenetic. Especially does the liability to the malady exist if the physician or any other attendant upon the parturient woman has recently come into contact with other cases of puerperal fever or with patients suffering from erysipelas, diphtheria, scarlatina, septicæmia, pyæmia, etc. This, in brief, is the view generally entertained concerning this dangerous disease.

That puerperal fever, however, sometimes though rarely exists without septicæmia, the following case tends to prove:

Mrs. H. C. D., white, multipara, was confined on the night of Tuesday, September 25th. The labor was easy and rapid. No complication occurred except that the placenta was adherent and required the introduction of the hand into the uterus to effect its removal. All went well for several

days.

On Saturday morning, however, about 3 o'clock, her husband came to inform me that she had had a severe chill a little after midnight, and that she was then suffering intense agony. On going to the house I found her temperature to be 103°F.; pulse very rapid. I at once ordered a mixture containing sulphate of morphia and bromide of sodium to lessen pain and to quiet the nervous system. I also administered morphia hypodermically. At the same time I gave ten grains of quinia sulphate with instructions to repeat the dose in a few hours. By 10 o'clock her temperature had fallen one degree, but at my afternoon visit I found that it

had risen to 104.8°. I therefore ordered some pills of quinine and opium, together with the following:

M. Sig.—3ss every three hours.

By the following morning her temperature had fallen to 101.8°. I then put her on moderately large doses of quinine and muriate tincture of iron with stimulants. In the afternoon her temperature was 102°, but a considerable reduction took place by the next morning. From this time forward she continued to improve.

On Sunday, October 7th, not quite two weeks from the night of her confinement and exactly nine days from the

onset of the fever, I made my last visit.

It will be observed that in the treatment of this case, no antiseptic measures were employed. At every visit I interrogated the nurse as to the appearance and odor of the lochia. She always replied that this discharge was perfectly normal in every respect. At the beginning of the fever I was apprehensive lest some portion of the placenta had been retained in the womb and was undergoing decomposition, thus producing septic infection. Had this supposition been correct, the lochia would in all probability have been suppressed, altered in character, or have emitted a fetid odor. In that case, I would have immediately resorted to antiseptic injections. But these were deemed superfluous inasmuch as the nurse constantly assured me that the quantity of the lochia was normal and that there was no more feetor about this discharge than we ordinarily expect, and as the patient progressed so favorably on tonics and stimulants. Another point negativing the supposition of septicæmia was the absence of the sweetish, hay-like odor of the breath so frequently observed in this and cognate affections.

For Malarial Neuralgia.

M. Ft. Sol. Sig.—Teaspoonful every hour until relieved.

Priginal Translations.

From the French. By R. M. SLAUGHTER, M. D., Theological Seminary, Va.

Cancer of the Larynx. (Continued from p. 487 October number.) As regards the treatment of cancer of the larynx, all the authorities advise recourse to surgical intervention, but do not meddle with the neoplasm, but simply practice trache-otomy to relieve complications. Others would remove the tumor, or even the vocal organ itself.

I. The tumor may be extracted by the endo-laryngeal method, that is to say, through the natural passages, or, by the extra-laryngeal, through artificial passages, laryngotomy.

A. Endolaryngeal Method. This method consists in destroying or extirpating the neoplasm with the laryngoscope as a guide. This method has been employed chiefly in cases where errors in diagnosis were made, the neoplasm having been considered non-malignant at the time of operation, but afterwards proving, on microscopic examination, or by its course, to have been malignant. Some surgeons have recommended this procedure as a therapeutic measure in certain cases.

The tumor may be cauterized by the galvanocautery or with lactic acid, but where this is done it is necessary first to scrape off the neoplasm. For extraction, are employed the forceps, guillotine, serre-noeud, or galvano-cautery knife. These procedures are more used for pediculated than for sessile neoplasms. Return, however, is not slow to follow local destruction and excision. The method does not give good results, and is to be rejected in the treatment of malignant tumors of the larynx, except in some cases of pediculated sarcoma of the upper larynx and clearly circumscribed cancers of the epiglottis which could be easily removed. These operations are to be rejected in all cases where adenopathy exists.

B. Laryngotomy. This operation consists in dividing the thyroid cartilage upon the median line, and separating the two sides with or without section of the cricoid and the thyrohyoid membrane. If a tracheotomy has already been done, the canula must be replaced by a canula-tampon to prevent the entrance of blood into the air passages. The operation may be performed with the head lowered. If tracheotomy has not already been performed care must be taken to do

it in such a way that healthy skin be left between the tracheal and laryngeal incisions, though the incisions for the thyrotomy may be made long enough to make the opening for the canula in its inferior angle. If the condition of the patient permits, the tracheotomy and thyrotomy may be done at the same time. The section of the thyroid having been made with bistoury and scissors, the two sides must be separated in such a way as not to injure the cords or fracture the cartilages. The neoplasm is then removed with cutting instruments, the snare (serre-noeud), thermo- or galvano-cautery. If it is necessary to enlarge the field of operation, the cricoid or even the thyro-hyoid membrane may be divided. The operation being completed, only the superficial tissues are sutured, and the canula must be left in for some time.

This operation is often rendered difficult by ossification of the cartilages, which occurs frequently in affections of the larynx—cancer in particular. It also has the inconvenience of injuring the insertions of the cords, giving rise to subsequent troubles of phonation. The preceding operation is designated total laryngotomy in contra-distinction to the operation of partial laryngotomy. This latter is designated as sub-thyroidean or supra-thyroidean, as the incision is below or above the thyroid. The supra-thyroid operation

is known also as sub-hyoid laryngotomy.

A. Sub-thyroid Laryngotomy is reserved for subglottic tumors. The incision may be made at the level of intercrico-thyroid space, or in case of need, the trachea opened

(partial tracheo-laryngotomy).

B. Sub-hyoid Laryngotomy gives access to tumors of the upper orifice of the larynx. Accordingly as is followed the inferior border of hyoid bone (Malgaigne), or the superior border of the thyroid (Folion), the pharynx or larynx is hit upon. Laryngotomy is an operation not frequently employed, and has given good results for only two or three operators. We could scarcely advise it, even in circumscribed sarcoma not yet invading neighboring tissue, and in very limited cancer.

II. Extirpation of the larvnx is complete or partial, as the whole or a part of the organ is removed. If the right or left half is removed, the extirpation is partial and unilateral. The operation is done as follows: A canula-tampon is placed in the tracheal opening, which has been previously made, or is now made, with a view to the radical operation. The patient is anæsthetized by means of Freudelenbürg's apparatus, and the larynx exposed by an incision along the median line of the neck, from the extremities of which are carried perpendicular incisions in the manner of two lateral arms. The larynx is next isolated and removed by detaching from below upward by preference. Solis-Cohen has proposed in some cases to modify the usual operation by leaving that part of the thyroid which is free of disease. He makes an incision upon each ala of the thyroid some millimetres from the median line so as to leave in place the median portion of the cartilage. He then detaches the cricoid from the trachea and the thyroid from the esophagus, and divides the thyroid membrane. This modification has the advantage of preserving the functions of deglutition.

The removal being complete, the Freudelenbürg apparatus is left or replaced by a canula, which completely fills the air tube. An esophageal sound is left in place for several days. This may be introduced either through the wound or through the nostril. The wound is well packed with iodoform gauze and sutured. The sound is left in place twenty days, though in some cases it may be removed on the third day (Gussenbauer). The canula-tampon is replaced about the eighth day with an ordinary canula, which is kept in until the artificial larynx is applied. If the wound opening is too large, it may be remedied by an autoplastic operation or a vocal tube of greater dimensions, and supplied, if necessary, with an obturator plate to replace the anterior wall of the esophagus and pharynx—(Lange).

In partial extirpation a vertical incision is made, from the inferior extremity of which is carried a horizontal one directed to the side of the larynx to be removed. The thyroid and cricoid are then split, and the trachea detached on one side and the removal made from below upward, as in total extirpation. In unilateral or partial extirpation nutrition is generally carried on by means of a tube for a short time. The voice may be entirely re-established, specially if at the level of the removed cord a cicatricial band is formed as happened in the case of Scheede.

To date, 167 extirpations of the larynx have been done by various operators (complete table given in the text) for

cancerous or supposed cancerous tumors.

30	total extirpations. partial " unilateral "	105 28 22	for cancer.	7 for 2 3	sarcoma.	
167	extirpations,	155		12	"	

In these 112 total extirpations, in six cases, there proved to be errors in diagnosis. One was a case of syphilitic stenosis, which was cured. In the other five, the tumors proved to be of a tuberculous nature, and the patients succumbed to tuberculosis at periods varying from one week to two and a half years after the operation. This leaves then

106 total operations upon malignant tumors.

Results obtained by this Operation. The operation of complete extirpation may be followed by accidents immediately due to the operation or complications affecting the respiratory apparatus. By strict antisepsis wound complications should be avoided. In fact, only two deaths have occurred from septicæmia, the one six days and the other three months after the operation. Proper precautions should prevent the flow of blood or other fluids into the trachea, and if these are taken, there need be no fear of suffocation of patients as has happened in two instances. Among the fatal accidents due to the operation, occurring in the first week, we find six cases of collapse or exhaustion, four of traumatic hæmorrhage (3 in cases of cancer, 1 in sarcoma), and one case of pulmonary embolism. Thus, in 106 operations, there were seventeen deaths from causes due to the operation, or a proportion of sixteen to the hundred. Of the remaining eighty-nine cases, twenty-five died of pulmonary affections (pneumonia, broncho-pneumonia, and pleurisy) in first month, the great majority of deaths occurring in the first week. One patient died of pulmonary gangrene on the twenty-seventh day. To the preceding cases there should be added three deaths from late pneumonia in the second, third and fourth months. Two deaths occurred after several weeks from inanition, arising from non-re-establishment of the function of deglutition, and the difficulty of nourishing by the esophageal tube. Suffocation from the entrance of a foreign body (in one case the canula) into the air passages, caused three deaths in the fourth, fifth and eighth months. One death occurred in the seventh week from the passage of the sound into mediastinum, and one in the third month from septicæmia. Four deaths were from causes unknown. Of the 106 cases operated on, we find that sixty four have died from various causes, a mortality of 62.8 per cent. Next as regards return of the disease, there are to be noted twenty-eight cases in the fifty remaining, four cases being sarcomas. In the large number of cases the time of the return is not noted. In thirteen cases of cancer proper the date of return is given:

1 case in the 6th week (death in 4 months after operation).

1 case in the 2d month.

2 cases in the third month (one death 8 months after operation).

4 cases in the 4th month (deaths 4, 5, 7, and 14 months af-

ter operation).

3 cases in the seventh month (one death in a very short time, the others living 8 and 15 months after operation).

1 case in the 12th month.

1 case in the 18th month (death in the 30th month).

In one case of sarcoma'a return occurred in the eighth month.

In the fourteen cases of return only the date of death is given varying from the 2nd to the 15th month after operation.

The mortality from return is 26 per cent., and is greatest

from the 4th to the 10th month.

Those surviving and without any return number 22 (20 who were attacked with cancer and 2 with sarcoma.) In the cases of only 9 of these have 12 months elapsed since the operation. These 9 may then be considered as cured. The greatest length of time any of these cases have remained cured is 5 years in cancer and 9 years and 8 months in sarcoma. The 9 favorable results give a percentage of 8.5. The percentage of recoveries then following total abbation is 9 in cancer and 28 in sarcoma.

Partial Extirpation. The number of patients on whom this operation was performed is 32, of which 30 had cancers proper. There were 12 deaths, 3 from collapse, 4 from pneumonia (in the first two weeks), 1 from pneumonia in the 3rd month (sarcoma), and 3 from unknown causes. This is a mortality of 37.5 per cent., of which 22 per cent. died in the two first weeks. There was a return in 6 cases in 3rd, 4th, 8th and 16th months in 4 cases. The other two cases both died 16 months after operation. In one other case the patient was attacked with cancer of the abdomen and died 2 years after the operation. The percentage of returns is 18.7. Of those who recovered and had no return at the end of 12 months, there are 5, giving 12 per cent. of recoveries. One of these patients has survived 7 years and 5 months. The results of this are then better than those of total extirpation.

Unilateral Extirpation. This operation has been done 25 times, 22 times for cancer and 3 times for sarcoma, and was 7 times followed by death; once from collapse on the 12th

day, twice from pneumonia in two weeks, once from pleurisy in the 10th month, once from septicæmia in 5th week. Cause unknown in two cases. Mortality of 18 per cent.—12 per cent. occurring in two weeks. There were 6 cases of return, all of cancers proper. The returns occurred in two cases in the 2nd month, one each in 3rd, 6th, 9th and 16th months. Per cent. of returns is 24. The recoveries number 12, of which 2 were cases of sarcoma. In 3 cases the length of survival is not noted. In the others it ranges from one month to 3 years and 4 months. Leaving out all cases in which one year has not elapsed since operation, we find the percentage of cures to be 20. This operation then gives the best results.

PERCENTAGE OF MORTALITY AND RECOVERY.

	Deaths in first 15 days.	Deaths later.	Deaths by returns.	Recoveries.
Total extirpation,	36 p c.	16 p. c.	26 p. c.	8.5 p. c.
Partial extirpation,	22 "	15 "	18.7 "	12 "
Unilateral extirpation	n 12 "	16 "	24 "	20 "

Extirpation. Its Indications and Contra-indications. Removal of the larynx is not an operation advocated by all surgeons. In France, Tillaux, Verneuil and Richet give preference to tracheotomy. As for ourselves, while formerly agreeing with Verneuil, we now recommend the operation in view of the good results obtained since the introduction of antiseptic dressings, etc. Fauvel does not hesitate to advise the operation. In England, Simon and Butlin, formerly partisans of tracheotomy, have had satisfactory results from extirpation. While most authors to-day advocate the operation, they do not do so in all cases of cancer, for every operation has its contra-indications. The earlier the operation is done the greater the prospect of success. As soon as the diagnosis can be confirmed by microscopic examination of a part of the tumor, it should be done.

The treatment of cancer varies according to the nature and extent of the disease, and according as the tumor is intrin-

sic or extrinsic.

Sarcoma. If limited to the epiglottis, and no glands are involved, the tumor may be removed through the natural passages, and preferably with the galvano-cautery. But if it occupy any part of the laryngeal vestibule, and particularly of the interior of larynx, laryngotomy or laryngectomy, total or partial, only should be thought of, according to the limitation or extent of the neoplasm.

Cancers. The same rules apply here as in sarcoma. In those cases in which the neoplasm is not clearly circumscribed, we would hesitate to advise the removal of the parts attacked with the peripheral tissues, giving preference to unilateral laryngectomy where the development of the

tumor permitted.

Where the tumor is soft, infiltrated and extensive, and if the glands are involved, radical treatment should not be resorted to; only palliative treatment is necessary. In very circumscribed neoplasms of the interior of the larynx, thyrectomy for the removal of the disease by galvano-cautery may be practiced. More advanced or extended cases require the more radical treatment. Palliative treatment only should be resorted to in those cases of very extended disease, or when pulmonary lesions or other serious affections exist, as for instance diabetes.

Palliative Treatment. The principles of palliative treat-

ment consist in the following:

The patient should be cautioned against too much use of the voice, as this tends to produce laryngitis. Morphia and cocaine are to be used for pain; antipyrine will also probably prove useful here. To prove useful, these remedies should be given hypodermically, by inhalation of a spray, topically in form of powders, or dissolved in glycerine. For the mucosities, expectoration and fetid breath, antiseptic gargles. sprays, and if necessary, direct applications are to be used. If hæmorrhage is feared, there should be prescribed hamamelis, internally and externally, and hypodermic injections of ergotine (Parke, Davis & Co.'s normal liquid ergot is a far more convenient form for hypodermic use. R. M. S.) Applications of astringents (tannin, etc.) may be advised, and the parts from which there is a bloody discharge should be touched with a 5 per cent. solution of zinc chloride or, better, with the galvano-cautery. To guard against the development of the tumor, powdered sabine and calcined alum in equal parts may be tried. For sometime past we have used for this purpose, and as a detersive, the tincture of thuya occidentalis internally in doses of 15 to 45 minims daily, and at the same time touching the tumor with the preparation. We have seen benefit from this in 5 cases, which in 3 cases was marked, and our experience encourages us to recommend the remedy in the palliative treatment of cancer, for it seems to us at least to arrest its evolution; and more, it is efficacious in combating the odor which accompanies the secretions. Should partly detached parts impede

respiration they must be removed and the points of implantation slightly cauterized. Should abcesses form, they must be opened. Fistulous tracts are often left from which spring cancerous vegetations which should be cauterized with the tincture of thuya or with actual cautery. Difficulties in swallowing are to be met by giving liquid and semi-liquid nourishment, or anæsthetics may be used. If necessary, the tube may be used which may be kept in place as has been done, in one case, for 305 consecutive days. If the dysphagia be due to infiltration and ulceration of the epiglottis, this organ may be removed through the natural passages or through an incision at the level of the sub-hyoid space (Solis-Cohen). Nutritive enemata and gastrotomy are the last resorts.

The first symptom the physician is called upon to treat is the dyspnœa which results from development of the tumor,

spasm of glottis, or ædema of the larynx.

If the patient is threatened with suffocation or if he has roaring (cornages) it is necessary in the first case, and prudent in the second, to make an opening for breathing as soon as possible. Generally it is between the first and the third year of the disease that this is necessary. According to the seat of lesion, one can choose between tracheotomy and laryngotomy. The latter operation is to be advised when the neoplasm is extra-laryngeal or projects into the pharynx. If, however, the tumor is seated in the neighborhood of the cricoid, the cartilages, or the peripheric soft parts are invaded, tracheotomy is the only possible operation. Tracheotomy may be done by making the incision with the galvano- or thermo-cautery knife or the bistoury. The section of the trachea should be made only with the The opening should be made as low as possible. Crico-tracheotomy is not to be recommended.

A certain number of accidents (collapse, asphyxia, hæmorrhage, septicæmia) may follow the operation. Some of these may be avoided by being careful not to perform the operation upon patients in extremis and by the observance of strict antisepsis. The canula used should have no opening upon the convex part of its curve, for vegetations may enter and obstruct the lumen of the tube, and give rise to asphyxia. The canula should be very long, so that its inferior end may pass the tumor below in those cases in which the cancer has extended into the trachea. It is very important that the canula should be kept clear, but its removal for the purpose of cleaning it is dangerous, for proud

flesh may obstruct the tracheal opening and cause suffocation and death, or fatal hæmorrhage may occur as has been known

Death usually occurs from inanition or a pulmonary affection. While tracheotomy may be immediately followed by considerable improvement, this is only temporary, for it does not impede the course of the disease. The statistical results of the operation are as follows:

4 patients (3.2 per cent.) died immediately.
20 " (16.2 ") died in two weeks.
82 " (60.7 ") died in the first year.
17 " (12.7 ") lived from 1 to 5 years.

Proceedings of Societies.

MEDICAL SOCIETY OF VIRGINIA.

FIRST DAY—NIGHT—OCTOBER 23, 1888.

The Nineteenth Annual Session of the Medical Society of Virginia convened in the Hall of the Young Men's Christian Association, Norfolk, Va., Tuesday, October 23, 1888—the President, Dr. Benjamin Blackford, of Lynchburg, Va., in the chair; Dr. Landon B. Edwards, of Richmond, Va., Recording Secretary, was also in place. The Hall (capacity about 400 seats) was well filled with ladies and gentlemen, besides the Fellows of the Society. About 180 Fellows in all were in attendance during the session—the largest number ever in attendance upon a session of this Society—representing every section of the State. In addition, Surgeon-General, Dr. John B. Hamilton, of Washington, D. C., Dr. Milton Josiah Roberts, of New York city, and Dr. L. L. Williams, Surgeon U. S. Marine Hospital Service, Fortress Monroe, Va., were present as invited guests.

After prayer by Rev. Dr. W. V. Tudor, pastor of Cumberland-Street Methodist Episcopal Church, South, a cordial Address of Welcome on the part of the professions of the "twin cities" of Norfolk and Portsmouth was well delivered by Dr. Herbert M. Nash, of Norfolk. His address abounded in historic allusions of interest, and in invitations of a social nature to visit various points of interest in and about the

two cities, besides banquets, etc.

Dr. William T. Walker, of Lynchburg, Va., was next introduced, who delivered the Annual Address to the Public and Profession—selecting as his subject,

Moses, and Other Doctors.

He remarked that the crown of glory belonging to this highest man in history is not complete until, to his titles of a messenger of God, warrior, lawgiver, statesman, etc., is added that of Doctor. His hygienic laws know no equals. He marched 2,500,000 people for forty years through the arid desert, and yet, while doing so, preserved a system of hygiene such as has never been known in the records of time. Every foul and putrid substance and all excreta had to be taken out of camp as soon as detected or deposited, and covered with earth (one of the best modes of disinfection yet known) or destroyed by fire. The most thorough cleanliness was required in all things. Chlorine preparations are among the best germicides known to-day, and yet Moses anticipated this latter-day discovery by requiring the preservation of meats by the use of chloride of sodium. He taught how to disinfect buildings after leprosy had infected them, or, if they could not be purified, to destroy them by fire. His laws in regard to the marital relations are perfection. the women of this age were to follow the special laws given by him for their guidance, there would be much less need for gynæcologists. Numerous other illustrations and references were made to the records of Moses to prove that he was a typical doctor. We say that preventive medicine must be the medicine of the future; but Dr Walker shows that it was the medicine of the past, and was made public by this great teacher. Then came Ezra, who, centuries after Moses had passed away, reissued, reinforced and enforced the Mosaic laws as to the maintenance of health. And it becomes a striking fact in history that while the other learned nations of those days had their schools of medical learning, the Jews had none; for the observance of the laws as handed down by Moses did not make it necessary to have physicians to heal the sick, for, practically speaking, there was very little sickness. References were made to the records of Hippocrates, of Celsus, of Galen, etc., down to the days of the Great Physician, who came not to destroy, but to fulfill them. Luke, the "beloved physician," was a scholar of the highest culture, and a faithful friend to Paul in prison, while it was dangerous for one to profess friendship for this disciple—illustrating that the true doctor does not flee from the claims of friendship and humanity when danger approaches. Touching allusions were made to the faithful doctors of Norfolk of 1855 when that terrible epidemic of vellow fever swept that city of its inhabitants

Tributes were likewise paid to those doctors of Jacksonville and other places, who, this year, are sacrificing their lives for the safety of the people of that and other places where vellow fever is still the scourge. Credit was awarded to the name of the late Dr. Crawford W. Long, of Athens, Ga., as the discoverer of modern surgical anæsthesia by the administration of sulphuric ether; and a eulogy worthy of record was likewise passed upon the immortal Dr. J. Marion Sims. Reference was made to others who have taken up the lifework of these great men in the profession and their like. Then, too, the doctor is the pioneer of civilization, and thus is shown how honored our calling is. The pharmacist now comes to our aid, in the preparation of medicines, making them so concentrated and attractive that even children cry The preparations made by Parke, Davis & Co., Sharp & Dohme, etc., are instanced in illustration. What a grand thing it is to be the young doctor in this age, when chemistry and pharmacy are advancing so rapidly and diagnoses of former difficulties are made easily, with the aid of recent and continuously developing discoveries and inventions! Let him aim high, and help to advance the dawn of day! Let him bring to his aid both curative and preventive medicine, and so prolong life to the allotted period of man.

The Committee on Nominations of Applicants for Fellowship reported favorably during the session on about seventy applicants who were elected to Fellowship.

After various announcements, etc., the Society adjourned

till 10 A. M., Wednesday.

SECOND DAY-MORNING-OCTOBER 24.

The Society was called to order at 10 A. M. by the President.

The Recording Secretary's Report gave information of the death of thirteen Fellows during the year just ended, and of the resignation of two Fellows because of their removal of residence from this State. It also noted some typographical corrections to be made in the printed Transactions of last session.

The Report of the Executive Committee, Dr. Wm. W. Parker, of Richmond, Va., chairman, noted the nomination in due form to the Governor of Virginia of Dr. James Parrish, or Portsmouth, Va., to fill the vacancy on the Medical Examining Board of Virginia, from the Second Congressional District of this State, caused by the removal of residence of Dr.

I. Lankford. The Governor duly commissioned Dr. Parrish as nominated.

On due presentation by Dr. Edwards, Section 1 of Article I of the Society's Constitution was so amended as to read: "No person shall be eligible to Fellowship (Honorary Fellowship excepted) who does not reside within the limits of this Commonwealth, and who has not received from some public school, society, college or university, legally authorized, a degree of bachelor or doctor of medicine or surgery, or who has not received in due form the certificate of having passed a satisfactory examination before the Medical Examining Board of Virginia." (All that part in italics constitutes the amendment—no part of the section as it formerly stood being altered.)

Dr. Thomas J. Moore, of Richmond, Va, presented the Report of the Committee appointed by the Joint Committees of the Medical Examining Board of Virginia during its last Annual Session to Petition the Legislature of Virginia to Amend the then existing Law. The committee succeeded in securing amend-

ments in the two important particulars, as follows:

(1) Requiring all applicants for license to practise medicine in Virginia to stand satisfactory examinations before the Medical Examining Board of Virginia in session; or,

(2) In exceptional instances, for sufficient reasons to be decided upon as such by the President of the Board, applicants may be granted permission to stand examinations before a committee of three members of the Board, the committee to hold the examinations only as a session, and not

individually as formerly.

At 11 o'clock, according to a resolution of the Society, Dr. Benj. Blackford called Second Vice-President Dr. John Grammer, of Halifax C. H., Va., (the First Vice-President, Dr. H. M. Clarkson, of the U. S. Marine Hospital Service, Fortress Monroe, Va., having been excused last night from further attendance on account of duties of quarantine officer for the port of Norfolk,) to the chair, while he proceeded to deliver the annual address of the President, selecting as his subject, Progress of Medical Education, and the Importance of the Study of the Physical Sciences in Relation Thereto during School Life. The scope of this well studied address is fully given in the title, and is published in full in the issue of our worthy contemporary, the Maryland Medical Journal, for October 27th, which covers so much of our own territory as to make it unnecessary to make fuller notes of it just now. Besides, it was ordered to be published in the Transactions of this session.

The next order of business was the discussion of the regularly selected subject,

Atypical Forms of Typhoid Fever.

The appointed leader of the discussion was Dr. Wm. C. Dabney, Professor of Practice of Medicine, etc., in the University of Virginia. He took the ground that the disease had become distinctly milder of late years than it formerly was, and that the symptoms, such as the *gradual* rise of temperature, the diarrhœa, and the eruptions which have usually been considered by writers on the subject to be characteristic, are now often absent. That these cases are genuine typhoid fever he considered proven by the following well established facts:

(1) The cases usually presented some of the peculiar char-

acteristics of the disease.

(2) Hæmorrhage from the bowels occasionally occurred in these cases.

(3) The intestinal lesions characteristic of the disease were

found on post mortem examination.

(4) These mild cases are capable of originating epidemics of typical character.

The conclusions at which he arrived were as follows:

1. That the disease throughout the whole of this country is gradually becoming milder, and that symptoms which were formerly thought to be characteristic and almost invariable are now much less frequently present.

2. That the diagnosis of the disease is often attended with extreme difficulty, and in the early stages is sometimes im-

possible.

3. That in those cases which are apparently extremely mild, dangerous symptoms may arise suddenly, and a fatal issue may ensue from errors in diet or other imprudence.

4. That in all doubtful cases precautions should be taken to prevent the spread of the infective principle or germ, and to guard the patient against dangers from imprudence.

5. That the dangers to be especially apprehended in these cases are exhausting diarrhea, hemorrhage, and perforation

of the bowel.

6. That, in view of the danger, patients should be placed upon liquid diet, should be confined to bed; and constipation, when present, should be relieved by enemata, and not by purgations, even of the mildest character.

Honorary Fellow, Dr. John Herbert Claiborne, of Petersburg, Va, unexpectedly prevented from attending the ses-

sion, forwarded a paper to be read in the discussion, of which

the following abstract is presented:

The first point in this discussion is the selection of a common ground upon which the contestants may standin other words, a definite understanding of what each may mean by the term "typhoid fever." The subject proposed is "Atypical Forms of Typhoid Fever." Now this supposes that there are, of course, typical forms. Then what are these? By the expression "typical form," he thinks we all agree that a representative form is meant, and a typical case of typhoid fever we understand to be a representative case. What are the symptoms which characterize a representative or typical case of typhoid fever? Taking the term typhoid in its generic or derivative sense, we should say that such a case should show, some time during its course, symptoms of stupor, or at least of dullness of mind or hebetude—a muttering or passive, rather than a marked or active delirium. We should say too that a typical case of typhoid fever would be characterized by a certain form of diarrhea; that there should be a peculiar but pathognomonic rose-colored eruption on or about the fourteenth day; that there should be epistaxis, ordinarily slight. We should say also that the fever was, to a certain extent, self-limited; that it was, perhaps, mildly infectious; that it oftener attacked adolescents, of both sexes; that it had its own recognized microbe; and, above all, that a post mortem should develop, unquestionably and distinctly, infiltration or ulceration of the glands of Peyer. We might add; perhaps, to the general symptoms, slight bronchitis, headache, anorexia, flushing of the cheeks, and a temperature progressively rising and subsiding.

The question then arises, how many of these symptoms, or which of these symptoms, can we eliminate from a typical case, to characterize it as atypical? In other words, if typhoid fever be a substantive disease, marked by certain pathognomonic symptoms and pathological lesions, how many or what symptoms or lesions can we take out and yet leave the disease an entirety—a recognizable unit? And if we are not in danger of multiplying words, are we not in danger of multiplying diseases to the confusion of diag-

nosis?

There is a fever—a summer and autumnal fever, common to many sections of this State—which it has become fashionable to note as typho-malarial fever,—a term which was originated during the late war between the States, and for

which the late Dr. Woodward, of the United States army. was perhaps responsible. At least, he contended that it was a substantive fever, with its own symptoms and its own pathological lesions; and though he subsequently confessed himself mistaken and recanted at the Congress of Physicians in Philadelphia ten years later, yet the name has never perished. Wherever there is malaria now—and it seems to be ubiquitous—there is typho-malarial fever. Dr. Cutter has published in parallel lines a differential diagnosis between typhoid fever and so-called typho-malarial fever which will throw good light on the present question. He thinks it will place the atypical form of typhoid fever where of right it belongs—in the class of the ordinary remittent or bilious remittent fever. Bilious fever, or remittent fever, or any other fever, may assume, under certain unsanitary or depressing influences, a typhoid character, but that does not constitute it the peculiar intestinal or enteric or typhoid fever of Louis or Gerhard or Wood; nor can he think there can be any blending of the two fevers—any swapping or coincident or concurrent cultivation of the microbes peculiar to each. And in the treatment of these cases of malarial or so-called typho-malarial fever, the early, honest and judicious administration of quinine will usually cut short the attack. I have rarely seen one of these hybrid fevers, as they are called, run into a typhoid condition unless there was some delay in the administration of the great antiperiodic, or unless it were given in pills or capsules, and, by consequence, undigested, or unless there was some idiosyncrasy present, or imagined to be present, which prevented the exhibition of quinine in telling doses. When it does not, you may suspect the correctness of your diagnosis, or know that there is present some local cause of irritation apart from malaria. In my experience, a mild mercurial every night (guarded or not with opium, according to the condition of the bowels), and from 20 to 30 grains of quinia sulphate at the period of remission, with 15 grains of antifebrin or 30 grains of antipyrin in three doses, at the period of exacerbation, will ordinarily cut short the fever in from five to ten days.

Dr. W. G. Rogers, of Charlottesville, Va., presented a paper, through the Secretary, tending to strengthen the evidence already existing that drinking water, polluted by imperfect sewerage, is a most fruitful source of typhoid fever. Previous to the establishment of the Charlottesville waterworks, by which pure mountain water is now supplied to

that city, there was much typhoid fever. Then his place was supplied by well water contaminated by surface drainage, etc. But now typhoid fever is comparatively rare, and the cause of the few cases that are occurring is traceable to the fact that the parties use well water. Of the total of 15 cases of this disease seen by him within the past two months. all were users of well water, which wells were plainly the receptacles of contaminated surface drainage. As illustrative of atypical forms of typhoid fever seen by him, he mentions one with very slow pulse in a boy ten years old. He also had all the usual signs and symptoms of typhoid fever. except fever itself. His pulse varied from 48 to 50 for three weeks, and gradually became normal as he recovered in about six weeks; and during the same period of depressed pulse, especially during the evenings, his temperature was subnormal, varying from 96° to 98° F. He reported also two slow-pulse cases occurring in sisters, aged 12 and 14 years respectively, sick at the same time; but the other prominent symptoms of typhoid fever were wanting, and the disease was definitely diagnosed simply by the fact that four typical cases were present in the same house at the same time, all due to the one cause of drinking contaminated well water. One slowly improved, and was convalescent in two months: the other sister died from asthenia at the end of the fourth week. Autopsy revealed several deep ulcers of the ileum, but no perforation. These girls developed a disposition to sing throughout the disease—a disposition not before developed. He reported another case, in a girl 17 years old, in which the average morning temperature (106° F.) was higher than the evening (104°). She apparently passed into a comatose stage several times, from which she was relieved by stimulants—an odd fact in itself. He also reported a uræmic case, relieved by jaborandi.

Honorary Fellow Dr. S. K. Jackson, of Norfolk, Va., said that he had, just fifteen years ago, presented a paper drawing attention to "Some Points in the Pathology of Typhoid Fever which Furnished Indications of Treatment," and which paper suggested a treatment altogether differing from that usually pursued. As the Society was likely to be interested in a suggestion first made on this floor, it was due to them to be informed of the history and growth of it, and of any changes it had undergone. The present paper was partly to fulfil this obligation, and partly to comment upon an important modification suggested by Dr. Barnett, of Wisconsin, viz.: the substitution of the ammonium salicylate

for the salts of ammonia, as proposed and used by him. He reproached the professors of our colleges for not studying and pronouncing upon so revolutionary a procedure, as to whether it contained anything of value, or whether it was to be denounced as worthless or dangerous. He showed that the ammonium salicylate could only be of value in typhoid fever from the small amount of nitrogen it contained, and on this account was greatly inferior to the more highly nitrogenized salts of that base; that the carbon compounds are only valuable in malarial fevers, and in proportion to the amount of carbon they contain; that they were all paralysant to the inhibitory nerve, and they become stimulants to the excitor nerves by destroying the normal equilibrium, and this power was possessed just in proportion to the atoms of carbon they contain. The lower members in the scale of carbon compounds, viz., the alcohols and ethers, were quick in their action, but evanescent in their effects. But as we ascend the scale we see a more decided inhibitory effect, and with a more pronounced antipyretic, antiperiodic and anagesic power, until we reach the top of the series in antipyrine and quinine. This class is only efficacious in those forms of fever which are caused by micro-organisms producing fermentative processes which exhale carbonic acid; but those producing putrefactive processes in which ammonia is evolved require the nitrogen compounds. Malarial fevers belong to the first, and typhoid to the latter. The first may be conquered by salicylic acid, the latter requires ammonia; and it is more than probable that the hybrid fever which has been called typho-malarial would be decidedly checked by the salt which combines both classes of remedies, viz.: the salicylate of ammonia. This has been found to be its most useful application.

Dr. Lewis G. Pedigo, of Roanoke, Va., remarked that an atypical form of typhoid fever had recently been prevailing in his city and vicinity. It was characterized by high temperature from the beginning, and caused, throughout the attack, great difficulty in controlling it. Some writers had described this as the cardiac form of typhoid fever, and was rare. It ran a very rapid course, and was generally fatal, because of the early failure of the heart. He called attention to the difficult differential diagnosis between such cases and a type of malignant continued malarial fever occurring in some localities. Even in the malarial forms of fever spoken of, quinia does harm, and it certainly should not be given in larger quantities than five grains within 24 hours in these

atypical cardiac cases of typhoid fever. From the commencement to the end of the fever muriatic acid seems to be the remedy, and should be given several times each day. Antipyrin, either alone or associated with muriatic acid, is also useful.

Dr. John H. Neff, of Harrisonburg, Va., confirmed all that Dr. Dabney had said about the peculiar types typhoid fever sometimes assumed, although their fields of observation were different. He had seen a number of cases of atypical typhoid fever, like those Dr. Dabney had described, during the summer just ended. Differences of opinion were entertained about these cases in Harrisonburg by the different doctors of that community—one doctor holding that they are cases of severe malarial fever; but Dr. Neff does not believe there is a malarial miasm in his city. However, he would like to have an expression of opinion by this Society on this point. Anyhow, early recognition of the nature of these atypical cases was very important. The best treatment consisted in absolute rest in the recumbent position, and in carefully selected, light, easily digestible diet. He thought the term "typho-malarial fever" a misleading misnomer. He thought we might as well adopt such terms as pneumonia-malarial. dysentery-malarial, etc. Environment modifies all diseases. He could not endorse Dr. S. K. Jackson's ammonia treatment, and does not believe in any specific for the disease.

In answer to a question by Dr. Jackson, Dr. Neff stated that he had used the ammonia nitrate treatment, etc., for a few months—sufficiently long and with unsatisfactory enough results to persuade him not to depend upon it in the

future.

(Adjourned for dinner. Further discussion on this subject postponed until Thursday night, but in order to keep up a continuous report we present the rest of the discussion now.)

Dr. C. T. Lewis, of Clifton Forge, Va., read a paper, on

Thursday night, directed principally to a

New Treatment of Typhoid Fever.

He thinks if we can keep the secretion of bile anywhere near its normal quantity and condition the disease will run a mild and favorable course, because the bile will destroy or prevent the germs of typhoid fever from finding lodgment in the intestinal canal, or will remove or destroy them if reached. Mercury in some form is about the best and the most commonly used cholagogue. Mercuric chloride is especially recommended, on the ground that it neutralizes

the toxic product of the disease-germs, without destroying the animals themselves, and acts more decidedly upon the liver as a cholagogue. The bile flows into the bowel and acts as a germicide and antiseptic. But after a while the continuous use of mercury brings out its own poisonous effects upon the human system, depressing especially the nervous forces, so as finally to bring about a typhoidal condition. It may even cause diphtheritic ulceration of the intestines, upon which ulcerations colonies of bacteria may settle. Podophyllin, rhubarb, jalap, euonamin, etc., produce a uniform bile secretion, but they irritate the bowels—they are purgatives as well as cholagogues. Ox bile (theoretically suggested as the correct drug) has been practically tried, but failed to accomplish what was wanted of it. After careful consideration of all the facts, Dr. Lewis now adopts the following plan of treatment: At intervals of two hours, give three doses (but no more) of a powder composed of two grains of calomel and one of rhubarb. After this, throughout the whole course of the disease, night and day, give 10 drops of dilute nitro-muriatic acid in a wine-glass of water every two hours. Also give a quarter-glass of fresh milk every three hours, night and day. If the acid and milk come at the same hour, give the acid first, as it gets out of the stomach sooner than the milk. If the patient becomes restless at night, give two grains of Dover's powders every two hours, beginning about 2 o'clock in the afternoon, until four doses, and no more, are administered. If the fever rises above 103°, bathe the shoulders, upper part of the chest, neck and arms in cold water every twenty minutes, with a basin of cold water by each side of the patient for his hands to play in, and cloths wet with the same cold water are laid around the neck and on the bowels. The result of this plan is that of 180 cases so treated by Dr. Lewis, only four deaths have occurred, and these deaths were the results of preventable causes by the patients themselves. Be careful not to allow solid food until the patient is well convalescent.

Dr. Alban S. Payne, of Markham, Va., totally differed with Dr. Lewis. The old treatment of Dr. George B. Wood was the best. If Peyer's patches were ulcerated, nitro-muriatic acid would do them injury as an irritant in such a fever.

Dr. George T. Walker, of Vinton, Va., asked if it was sufficient length of time to allow two days after the fever leaves before letting the patient take any solid food?

Dr. Lewis replied that two days was ordinarily long enough. Then he begins by giving a small Irish potato

and a little light bread.

Dr. William W. Parker, of Richmond, Va., gives a little-chicken soup as soon as possible. It is easily digested and is nutritious, and is not irritant to the inflamed ileo-cæcal region of the bowels.

Dr. George E. Wiley, of Abingdon, Va., asked Dr. Lewis if he ever gave any antipyretics during the course of the

fever?

Dr. Lewis answered that he did not, except the cold-water

baths he had referred to in his paper.

Dr. J. H. Neff, of Harrisonburg, Va., said that he had no faith in any routine treatment in typhoid fever. Early diagnosis is most important. In many cases absolute rest, both mental and physical, absolute diet, proper surroundings, with good nursing, will lead to recovery. Each case must be individualized and treated according to its symptoms. Some patients cannot take milk. In such cases he gives chicken and beef soup. Antipyrin, antifebrin, quinine, etc., often ameliorate the symptoms, according to his experience. Morphia often acts well in inducing sleep, easing pain, and lessening temperature. Observation shows that quinine is still a good antipyretic, especially in the afternoon, and in many cases does not irritate the stomach or depress the system, like antipyrin and antifebrin. Opium is also often a splendid antipyretic. But sponging the body with cold weter, often repeated, allows us often to dispense with antipyreiics. Aperients are not indicated in any stage. He relies upon enemata to relieve constipation. The mortality of this disease is greater between the ages of 20 and 30 years. When hæmorrhage from the bowels occurs he gives opium and enjoins perfect rest.

Dr. Henry M. Patterson, of Staunton, Va., spoke of the atypical form of typhoid fever which starts off with high fever and headache. In such cases we must give some such remedy as antipyrin. Quinine also acts well in these cases. If, however, the sudden onset of high fever and headache spoken of is followed by a chill, the case is not one of typhoid fever, but is a continued fever of another kind. In regular or typical cases of typhoid fever he has had good effects

from aconite as an antipyretic.

Dr. Wm. L. Robinson, of Danville, Va., stated that typhoid fever varied in different sections, being modified by malaria and hygienic surroundings. An uncomplicated case of ty-

phoid fever, commencing with general malaise, moderate fever, dry tongue, quick corded pulse, gradually increasing temperature reaching its acme at the end of the second or third week, subsultus, tympanites, tenderness in the right iliac region, hot dry skin, red tongue, delirium, etc., required conservative management, such as moderate quantities of liquid diet, avoiding that excess which fails of digestion and produces fermentation, diarrhea, etc. Turpentine is a diffusive stimulant and antiferment, as is carbolic acid in combination with tincture of iodine. High temperature produces changes in the blood and parenchymatous degenerations which weaken the muscular power of the heart. tipyrin in moderate doses quiets the nervous system, reduces temperature, and does much less harm than continued high temperature. The rectal use of digitalis, opium and whiskey sustains well the flagging circulation. The use of alcohol in fevers, as recommended by Dr. Flint in his paper before the International Medical Congress, he fully endorsed. He believed in guarding the stomach and guiding the patient through the attack. He could not concur with Dr. Lewis in the use of ten drops of nitro-muriatic acid every two hours and a quarter of a glass of milk, first, because he believed it would in such quantities produce irritation of the alimentary canal and coagulate the milk and cause fermentation and gas.

In reply to a criticism, he stated that while nitro-muriatic acid in proper proportion aided digestion of milk, yet in the quantities suggested by Dr. Lewis it would produce results first claimed. He stated further that the pathological condition of the alimentary canal in typhoid fever implied ulcerative and inflammatory condition, and that it was a well known fact that even in ordinary ulceration of the stomach an absolute alkaline condition offered the only redress. He therefore concluded that such an amount of acid as was suggested was irrational. He urged upon the Society to be slow in accepting the statistics of a limited number of cases as proof of the efficacy of any line of treatment, for the epidemic might have been, and most probably was, of a mild type, and needed little treatment of any kind. He believed that ten drops of nitro-muriatic acid every two hours and a quarter of a glass of sweet milk would, if persistently used, put any man in bed in forty-eight hours. He had not heard the papers and discussions (being detained by sickness), but was convinced that that form of fever which presented excessive high temperature in the beginning, clean tongue, a pulse not exceeding a hundred, good digestion, no diarrhea or tympanites, etc., would be materially modified by quinine, because malaria was the complication

Dr. Hugh T. Nelson, of Charlottesville, Va., said that he had received his medical education in Piedmont Virginia. and that, at that time, typhoid fever was considered the fever of the section, but that upon settling in a section of the State in which malarial disease was of frequent occurrence he frequently thought he saw cases of typhoid or enteric fever. Subsequently, upon removing to Charlottesville, he saw a great many cases of continued fever, some of which resembled the cases he had seen in the lower country, while others differed from it in many particulars. The important point was to decide in any given case of continued fever whether or not we had present a disease which had its starting point in irritation and subsequent inflammation of the intestinal glands. Unless this point could be determined there was no certainty that we had typhoid fever. Hæmorrhage from the bowels occurred by passive congestion in cases of fever in which, though the intestinal glands showed congestion also, there was no ulceration and no actual acute inflammatory condition. In another class of cases of continued fever the hæmorrhage, when occurring, occurred by an acute inflammatory process which destroyed the previously much enlarged intestinal glands and the blood vessels supplying them—the general mucous surface of the bowel remaining intact, or else only showing slight active congestion, evidently secondary to that maintaining in the glands. He believed this to be the characteristic form of hæmorrhage and typhoid fever.

There were certainly atypical cases of this typhoid or enteric fever, but many cases are no doubt in the category of typhoid fever which do not properly belong there. The importance of a differential diagnosis cannot be overestimated in the study of continued fevers, so that proper treatment

may be instituted.

Dr. Lewis G. Pedigo, of Roanoke, Va., objected to certain doctrines laid down by Dr. Robinson. He believed that the great effort now being made to arrive at a specific treatment of typhoid fever would finally bring about a tangible result. He called attention to the fact that the trend of medical thought and medical practice in this connection is towards the chlorine group. He believes that the proper use of some member of this group of germicides would finally fur-

nish the key to the solution of the great problem. He criticized Dr. Robinson's objection to the acid treatment by suggesting that muriatic acid is an important agent in digestion, and, so far from aggravating the already existing irritation of the alimentary canal, it has a tendency to relieve such irritation by preventing fermentation, which produces the irritating agents.

Dr. C. T. Lewis does not believe that nitric acid prevents

putrefaction.

Dr. L. B. Anderson, of Norfolk, Va, remarked that all the speakers had assumed that bacteria are pathological factors, whereas they never have been and can never be such. They are of vegetable, and not animal origin. He has never seen any sign of life in any vegetable or animal matter, or laudable pus from anthrax, furuncle, abscess or gonorrhæa until it had been exposed to the air under suitable temperature—until, in short, fermentation or putrefaction had developed. Bacteria, therefore, are a product, and not the cause of fermentation or putrefaction. We should rather look upon bacteria as the best friends the doctor has in preserving health.

Dr. Wm. C. Dabney concluded the discussion by defending his paper read yesterday morning.

SECOND DAY-WEDNESDAY-NIGHT.

Called to order by Vice-President Dr. W. D. Turner. On motion, Dr. Hugh T. Nelson presented the report of the Secretary of the Medical Examining Board as follows:

> Office of Secretary of the Medical Examining Board of Virginia, Charlottesville, Va., October 9, 1888.

H. Grey Latham, M. D.,

President of the Medical Examining Board, etc., Lynchburg, Va.:

Dear Sir—In response to instructions from yourself of a recent date, I have the honor herewith to transmit to you an abstract of the operations of this Board since its organization in Richmond, Va., on the 15th day of November, 1884.

Under the original Act to Regulate the Practice of Medicine and Surgery in Virginia, this Board was composed of 32 members, of which number 18 were present, and an organization was effected, with Dr. W. C. Dabney as President, and the now lamented Dr. Frank D. Cunningham as Vice-President. Plans for examination were adopted

and a regular session fixed upon, to be held in Richmond

on the 9th of April following.

The plan of examinations as then adopted is still in operation, and for thoroughness and fairness has recommended itself to the members of the Board, the Profession of the State, and to like organizations in other States. It is as follows:

Applicants are examined upon the eight grand divisions into which the study of Scientific Medicine may be divided, viz., Chemistry, Anatomy, Hygiene, Physiology, Materia Medica and Therapeutics, Obstetrics, Practice, and Surgery. (Medical Jurisprudence was subsequently incorporated with

Hygiene, and Gynæcology with Obstetrics.)

The Board was subdivided into eight committees of four each. (The homosopathic members were afterwards given place on five of the committees). To each committee was assigned the work of conducting the examination on a separate subject. Furthermore, each committee selected and reported the questions on its branch to the Board in session, when the questions thus reported by the chairmen of the committees, were investigated, and approved or disapproved—such questions as were disapproved being remanded to the committee for revision or substitution.

At the first examination held, there were present 23 Examiners and 26 applicants. Of the 26 applicants, six failed to answer three-quarters, or 75 per cent. of the questions propounded—the standard adopted by the Board—and were notified that the Board could not grant them permits to get

license to practice.

Of these rejected applicants, two (Dr. B. B. Halsey, of Orange county, and Dr. T. L. Booton, of Rappahannock) entered on professional work without the permission of this Board, and in open defiance of the law of this Commonwealth. Both, however, have been indicted and punished, the lower and highest courts of this Commonwealth sustaining the Medical Examining Board in every point in

which its constitutionality was attacked.

Under the system of individual examinations, as provided for in the Medical Act of 1884, twelve persons applied for license, and one of them was rejected—between the adjournment of the session in April, 1885, and the session held at Alleghany Springs on the 15th of September of the same year. At this session there were present 20 Examiners and only one applicant, who passed a successful examination. At this session you were elected Vice-President of

the Board to fill the vacancy caused by the death of Dr. Frank D. Cunningham, who was the second member removed from its ranks by the fell destroyer—Dr. Thomas B. Ward, of Norfolk, having died before the first regular session convened.

In the spring of 1886, the Legislature so amended the Medical Act as that five homeopathic physicians should be added to the already-existing 32 members of the Board. These were assigned, one each, to the committees on Jurisprudence, Materia Medica, Obstetrics, Practice, and Surgery.

On April 7th, 1886, the Board met in session in Richmond with 19 members in attendance out of a possible 37. Of these, three were new members—Dr. T. J. Moore, of Richmond, whom the Governor had commissioned in place of Dr. Cunningham; Dr. H. M. Nash, of Norfolk, in place of Dr. Ward; and Dr. Hugh M. Taylor, of Richmond, in place of Dr. O. A. Crenshaw resigned. Thirty-four applicants presented themselves, of whom eight (8) fell below the standard, and were refused licenses. The President reported eleven (11) examinations in the recess immediately

preceding, with three failures.

On the 26th of October of the same year, the fall session of the Board was held in Fredericksburg, and was called to order by yourself as Vice-President—Dr. W. C. Dabney, who had been recently elected to a professorship in the Medical Department of the University of Virginia, having tendered his resignation to the Governor, and the said resignation having been duly accepted. Twenty-three (23) members of the Board were present. You were elected to the position uacated by Dr. Dabney, and Dr. J. Herbert Claiborne, of Petersburg, was elected Vice-President. Seven candidates applied, of whom two were rejected. You and Dr. Dabney reported thirty-two (32) examinations during the preceding recess, with five (5) failures.

At this session a set of By-Laws, drawn up by a special committee, was canvassed by the Board, amended in several particulars, adopted as amended, and ordered to be printed in pamphlet form along with the full report of the work of the Board during first two years of existence. Copies of this report are on hand. A notable feature of these By-Laws is the regulation adopted with regard to a minimum standard, in which it is expressed that any applicant who shall fail to answer satisfactorily one-third, or 33½ per cent.

of the questions propounded on any branch, shall be refused license, even though he aggregates 75 per cent as the whole. This was demonstrated a necessity from the fact that some applicants entirely ignored the questions in one section, trusting to making up the deficiency on others.

The spring session of the Board for 1887 convened in Richmond, on the 5th day of April, with only fifteen (15) present, out of a membership of thirty-seven (37). Dr. I. S. Stone, of Loudoun county, had been commissioned by the Governor as a member from the State at-large vice Dr. Dabney resigned. Nineteen applicants appeared, of whom twelve fell below the required standard. At this session effort was made to find out whose especial duty it should be in any given city, town or county to bring violators of the Medical Law to Justice; and as the question is still in an unsatisfactory shape, it is urged that you bring the matter closely to the attention of the State Society in your report to that body.

It appeared from the President's book that in the recess just closed five (5) persons had been licensed and none rejected. At this meeting the resignation of Dr. Harvey Black was reported to the Board from the Secretary's office of the Medical Society of Virginia, and Dr. A. Trent Clarke, of South Boston, Halifax county, Va., was announced to have been commissioned by the Governor in his stead. Dr. Black resigned, on removing from his district (as required by law) to take charge of the Southwestern Lunatic Asylum.

On October 17th, 1887, the Board convened at Richmond for the purpose of holding its regular fall session, and twenty-one (21) members answered to roll-call. Two applicants appeared. One of these walked up to the blackboard on which the questions were written, looked at them, and, remarking that he preferred to stand his examination before three individual members, walked out; the other applicant was taken sick, and did not finish the examination. The questions referred to can be seen by any one on application to me.

It appeared from the record on the President's book that in the recess just passed, thirty-seven (37) persons had applied for license through individual Examiners; and the Board, after a full discussion, concluding that the sessions of the Board would in future be very poorly attended by applicants, which would result in a great deal of extra work and expense to the individual members composing the Board, determined to present a memorial to the Medical Society of Virginia, urging such change in the then law as would do away with the system of individual examinations. Dr. T. J. Moore was appointed to convey this memorial to the State

Society, urging that body to press the desired change in the Legislature, then about to convene. The plan formulated by the Board was that a committee of six—three from the State Society at large, and three members, constituting the Legislative Committee of the Examining Board—should bear the petition from the Medical Society of Virginia to the Legislature, requesting the General Assembly to make the

designated change in the law.

How the message of Dr. Moore was received by the State Society; how other changes were advised by members of of that body and united with the change requested by the Board, is no concern in this report. Suffice it to say here that the joint committee discharged its work with gratifying results to every member of the Board, and we believe and hope to every member of the State Society and the profession generally, who may be interested in advancing the standard of medical education.

The indignities, rebuffs and insults heaped upon the Medical Examining Board and its committee, in endeavoring to do its duty and place the State Examining Board upon a high basis, need not be recounted here; and it is a matter of regret that the remembrance of the scenes enacted in the committee rooms both of the Senate and of the House of Delegates of Virginia, when your committee was there in the discharge of its high mission, cannot be blotted out forever.

On the 3d of March, 1888, the Governor signed the amended Medical Law, and now individual examinations are a thing of the past, save that the President (for cause, and at his discretion) may order special examinations to be

held by a committee of three members.

Under the amended Medical Act, the spring session of the Board was held in Richmond, commencing on the 17th day of April, 1888. Seventeen members were in attendance out of a possible thirty-seven (37). Dr. Lankford's accepted resignation, in consequence of removal from his district, led to the commissioning of Dr. James Parrish, of Portsmouth, in his stead. Thirty-four (34) applicants for license presented themselves, of whom twenty-six (26) received permits.

Full reports of the work done by the Legislative and Executive Committees of the Board were read, accepted, and ordered to be spread upon the minute book. A printed report of the entire proceedings was published in the Virginia Medical Monthly for May, 1888, and reprints of the

same are now on hand, in which is a complete summary of the entire work done by the Board from its organization to the close of the spring session of 1888. It is indeed a matter of regret that this report contains some errors, but it is hoped that they may be corrected to the satisfaction of all parties concerned. In the recess of the Board, prior to this session, only four (4) persons had been examined by individual members of the Board, and no failures were reported, though one applicant has never completed his examination. One of these applicants was examined by your order, after the amended law went into operation.

Before the adjournment of the spring session of the current year, 1888, it was determined that a session of the Board should be held at Roanoke City, commencing on July, 17, 1888, and notice of the session was duly sent to

each member of the Board.

At the time and place specified, only eight members of this Board were present, and twelve applicants for license presented themselves. The situation was an embarrassing one, and the signal failure of the members of the Board to answer the summons was astonishing. The desperate struggle through which the Board had just passed, in an endeavor to maintain its own existence, though, they had come out more than victorious, it seems to me, should have been stimulus enough to have secured a full attendance, and not a second time to have imperilled the the life of the organization. The matter had to be managed so as to make the work about to be done legal, and prevent the possibility of having this work set aside by the courts. With this object in view, you instructed me to issue orders to Drs. Clarke, Preston, Walker, W. J. Harris, Robinson, and Wiley-six of the eight members present, yourself and your Secretary making up the number present—to constitute themselves into two committees of three each, as called for in section 4 of the amended Act, and examine the applicants present. This they proceeded to do, with the following result: Six were granted permits to practice; five were rejected, and one withdrew. Prior to the time of the Roanoke examination, you had instructed me to issue examination permits to three persons to stand before a committee of three, specifying on what branches each member of the committee should examine the applicant. These three and one other, to whom you subsequently granted a like permission, were all given certificates to obtain license. Prior to the Roanoke examination, Dr. Wm. B. Canfield,

late of Baltimore, but then acting the role of Resident Physician at Orkney Springs, wrote me in regard to time and place of holding the next examination. This was only two weeks before the examination was to be held, and he was notified fully, but did not put in his appearance. On my return home, I found a letter from Dr. Canfield, stating that neither he nor the manager of the Springs deemed it necessary or convenient for him to go to the trouble of going over to Roanoke to undergo the FORMALITY of a State examination; and requesting that some special arrangement be made for him. You were promptly informed of the correspondence, and it was referred to you. Your reply was forwarded Dr. Canfield through the medium of the Commonwealth's Attorney of Shenandoah county, from whom I received reply that he could not then indict Dr. Canfield, as he had no Grand Jury term of his court till Octoberthis month—but that he would put him under bond for his appearance before that term of his court. I have not heard further from the Attorney.

I see no reason why physicians from other States should

be granted exemptions not accorded our own citizens.

I have been informed that a Dr. Luddington, of Powhatan county, is practicing medicine illegally, and steps are being taken to have him and all others violating the law, brought to justice.

And now, sir, I bring this already lengthy resumé to its end by submitting a tabular statement of the results of the

work of the Board.

I am, sir, with great respect, your very obedient servant, Hugh T. Nelson, M. D., Secretary and Treasurer.

[See table on following page.]

RESULT OF WORK DONE BY MEDICAL EXAMINING BOARD OF VIRGINIA.

(January 1, 1885, through October 9, 1888, inclusive.)

INSTITUTIONS REPRESENTED BEFORE THE MEDICAL EXAMINING BOARD OF VIRGINIA.	for from Each.	Total Rejections from Each.	Certificates Issued.	Number of Rejections Mak- ing Second Applecation.	Second Rejections.	Certificates Issued on Second Application.	Incompleted examinations by Withdrawal or Otherwise
Medical College of Virginia, University of Virginia, Medical Department. College of Physicians and Surgeons, Baltimore, Md. University of Physicians and Surgeons, Baltimore, Md. University of Maryland. Medical Department, Baltimore. Jefferson Medical College, Philadelphia, Pa. University of Pennsylvania, Philadelphia, Pa. Bellevue Hospital, Medical College New York. University of City of New York, Medical Department. College of Physicians and Surgeons New York. Louisville Medical College, Kentucky. Hospital Medical College, Centucky. Hospital Medical College, Kentucky. Mentucky School of Medicine, Louisville, Ky. Kentucky School of Medicine, Louisville, University of Louisville, Wy. Medical Department, University of Tennessee. Nashville. Vanderbilt University, Medical Department, Tennessee. Detroit Medical College, Meisigan, University of Michigan, Ann Arbor. St. Louis Medical College, Missouri. Columbus Medical College, Ohio. Cincinnatti Medical College, Ohio. Cincinnatti Medical College, Raleigh, N. C. Medical Department University, Washington, D. C. Leonard Medical College, Raleigh, N. C. Medical Department University of Georgetown, D. C. Hahnemann Homœopathic Medical College, Philadelphia, Medico-Chirugical College, Philadelphia, Pa. Geneva Medical College, Md. Colleges Unknown. Non-Graduates. Cleveland Homœopathic Hospital College, Ohio.	577 333 344 344 122 667 773 223 311 1773 1114 1111	8 1 1 10 9 9 3 3 11 2 2 11 1 1 1 1 1 1 1 1 1 1 1 1 1	488 322 244 255 33 1 1 1 2 2 1 1 1 1 1 2 2 1 1 1 1 1 1	1 1 1 1 2 2	4	1 1 1 1	1 1 2 2
Total No. of Examinations No. of Applicants (a) Individual Examiners Examined by (b) Board in Session	117 123	54	181	25	10	15	5

N. B.—The 1st and 3d columns add up 243 and 184 respectively; but three of the applicants each gave two Colleges of Graduation.

[Note by the Editor.—We are promised a Supplementary Report from the Board, which we hope to present in our December number; if not then, it will appear in our January number, 1889.

On motion by Dr. R. A. Lewis, of Richmond, Dr. Hunter

McGuire was invited to present his paper.

Dr. Hunter McGuire, of Richmond, Va., in responding, said that he had no paper.* He had read papers so often before the Society that it seems that the Secretary, Dr. Edwards, always expected one from him. He had read a paper before the American Surgical Association, a few weeks ago, which was published in the last number of Dr. Edwards' journal. After giving the paper to Dr. Edwards, and before it was published, he asked the editor to change its title and make it read "The Formation of an Artificial Urethra in Enlargement of the Prostate." By some mistake, Dr. Edwards supposed it was another paper, and one to be read before this Society. He so announced it, but it was an error.

While up, however, he would comply with the request, which came from so many Fellows, and say something about Dr. Black's case. He was not surprised at this request, as he knew how universally Dr. Black was respected and beloved. He was so gentle and kind, so pure, straightforward and honest, so thoroughly unselfish, thinking always of others and forgetting self, yet withal so brave and manly, that no one could be in his presence for a moment and not respect him, and no one could know him well and not love him. He needs no eulogy here; you all knew him as your Fellow and former President. He would not like to himself to speak of Dr. Black as his friend. They had been friends for twenty-seven years, and that friendship was never broken by the jar of a word or thought. During the four years of civil war they were daily together, and many a night slept with the stars above them, under the same blanket. His personal relations with him were too sacred to talk about here. Usually, when one man dies, it is like the fall of a leaf in a great forest; in its descent it shakes and rustles other leaves, but if you look up you can scarcely see from whence it came, or miss it from the immense foliage. But Dr. Black's death was a greater shock than this; it was like the fall of some grand oak, which shook the earth around it—not only his family, his friends, this Society and his profession, but the whole community felt it. Another and a sad class of people will also feel it—the insane—to whose relief he had devoted so many years of his life. Dr. McGuire happened to know that Dr. Black had

^{*}These notes of Dr. McGuire's remarks were taken by the Secretary, and have been revised by him.

in view important improvements and changes for the good of the insane, which no other man now living, he feared,

could complete.

He came to Dr. McGuire a year ago, suffering with vesical calculus and enlarged prostate. You gentlemen, of all others, can estimate the courage which was required of him to carry on his great work while laboring under such troubles. The stone was removed, and the consequences of the prostatic enlargement relieved for a year, and he kept busily at work. A few weeks ago he came again to see Dr. McGuire, when it was found that another stone had formed, but along with it now was surgical kidney. The second stone was removed, but in a few weeks his frail and diseased body succumbed, and he died as he had lived, a brave and honest man, a noble and great-hearted gentleman.

At the solicitation of the Society, Dr. McGuire continued

his remarks on

Prostatic Enlargement-Its Consequences and Treatment.

This is the way (surgical kidney) that men usually die who have serious obstruction to the passage of urine. In both sexes, and at all ages, mechanical obstruction to the passage of urine from the kidney ends in cystitis, ureteritis, pyelitis and pyelonephrosis or surgical kidney. The obstruction may be due to stricture, enlarged prostate, tumor, stone, etc. It ends, sooner or later, in surgical kidney. A very common cause for this is enlarged prostate. This comes on after 55 years of age. As far as my experience goes, if a man escapes this trouble until he is 63, he is not apt to have it. We all know how common it is in old men-so common that I sometimes wonder that it was not included in that wonderful description of old age which we find in the last chapter of Ecclesiastes. Possibly senile hypertrophy did not belong to that period, but is one of the results of socalled modern civilization. I don't know; I only know that hypertrophy of this gland is, with rare exceptions, peculiar The prostate is a curious body; it is made up of fibrous, muscular and glandular tissue. It would be as well, if not better, to call it the prostatic muscle as to call it the prostatic gland. It supports the bladder, which is otherwise so lightly and so feebly held in its position. The erect posture which man assumes puts a great strain on this body. Indeed, this might be used as an argument that it was intended for man to go on all fours, like the quadrupeds. When deterioration of all the tissues begins—that is, about 55 years in man—this structure commences to get

bigger. It may enlarge towards the bowel, and do little or no harm; but if its growth encroaches in any way on the lumen of the urethra, then trouble begins. Put your finger in the patient's rectum, and you may find the prostate greatly enlarged, and yet the man have no evidences of urinary obstruction; and on the other hand, the finger may reveal to your sense of touch no increase in the size of the gland. and there yet may exist marked prostatic obstruction. There may be new growths, tumors, true myoma, which can only be felt by the finger in the bladder. Indeed, the enlargement may be centric or eccentric. You cannot reckon the extent of obstruction by the mere size of the gland felt through the rectum. All this depends upon the direction of the growth. Let it encroach, even slightly, upon the urethral canal and lessen its size, and then soon follows irritability of the bladder, retention of urine, cystitis, and if this goes on, ureteritis, pyelitis and pyelonephritis.

I see before me to-night as I make these remarks, which I certainly did not expect to make, and for which I am entirely unprepared, many gray-headed men who are listening to me with great attention and interest. Some of you "old Fellows" may already know that your prostates are getting larger than they used to be—that it takes you a little longer to make water now; that it is slow to start; that the stream is not sent as far from your body, but drops down between your legs, which you keep wide apart to prevent your trowsers from being splashed. I advise you to try to empty the bladder every time you urinate, and not leave in it some residual urine, which will decompose just as it would do in a dirty chamber-pot, and afterward set up in the bladder irritation and inflammation. Take care also to keep your body, especially your feet, dry and warm; don't sit on a cold stone or a wet saddle; keep your bowels open and let whiskey alone.

If the enlargement goes on increasing, and the calibre of the urethra is more and more diminished, more prominent and serious symptoms are presented. Sudden retention of urine may occur, requiring the use of the catheter, or, (and this is just as frequent,) the patient will tell you that he can not hold his water—that he has incontinence of urine. This condition generally means that his bladder is distended with urine and overflowing, and the catheter is required here to relieve the over-distention. It would be out of place for me to talk about antiseptics and germs now; but it is not out of place for me to beg you to keep your catheter clean—a dirty catheter is a very dangerous instrument.

After a long or shorter time, this enlarged prostate forms a dam at the outlet of the bladder, and only the water above the level of the dam escapes during micturition. Some urine, which is called "residual urine," is always left in the bladder. This decomposes, becomes ammoniacal, is an irritant, and sets up cystitis; the poor sufferer strains violently to make water. This tenesmus of the bladder, provoked by the obstruction, injures the vesical end of the ureters; these tubes become involved, and the disease extends to the pelvis

of the kidney, and frequently to the kidney itself.

Try to prevent the cystitis if it be possible. You may know that it is coming by the irritability of the bladder, by the frequent calls to urinate, by his telling you that he never feels "like he is done" when he makes water, by his sense of weight, fullness and discomfort about the bladder, and by the other symptoms I have mentioned. It is not worth while now to try drugs of any kind, nor dilatation by bougies, to lessen the size of the prostate. I spent a good deal of time and money in endeavoring to reduce the gland by electrolysis. In my hands it did no good. The only good you can do is by using the catheter—a clean gum catheter letting the dirty residual urine escape, and, if need be, by washing the bladder clean with hot water—at the same time you must attend to the general health, and mode of life. Very often in this way the man will go on for months very comfortably. Sometimes the enlargement, if it be due to simple congestion and irritation, will pass away under this course, and the parts be restored to their normal state. But if the enlargement be due to a true fibroma or myoma, or if the hypertrophy be diffuse and fixed, then you may be sure the trouble will increase, and you will soon come to a period where palliation is no longer possible, and you must resort to operative measures.

It is wouderful how long a man may use the catheter, and the bladder retain its power of expelling the urine when you make a free opening into that organ. One of my patients had used the catheter for three years, never once in all of that time passing a drop of urine through the urethra without the aid of an instrument. As soon as I made an artificial urethra for him, he could send the urine in a steady stream three feet from his body. In this case the prostatic obstruction was so great that he often spent half the night trying to get the catheter into his bladder. When I opened his bladder and introduced my finger, I found that long continued vesical tenesmus had pushed a part of his blad-

der down behind the prostate, making a pouch or cul-de-sac there two inches deep, and, in this pouch, what I had not suspected, a large phosphatic stone. I had sounded this man repeatedly for stone and had not found it. A very short time afterwards, another man was brought to my hospital, a poor old preacher who had been in bed for seventeen months, with fearful cystitis from prostatic hypertrophy. I sounded him as carefully as I knew how to do for stone, but found none. When I opened his bladder to make for him an artificial urethra, the first thing I felt was a stone down in a pouch behind the prostate. When I tell you that I have operated for stone in the bladder, one was or another, 150 times or more, you will think this confession a strange one. It is nevertheless true, and I expect, before I operated in this way for prostatic hypertrophy, that I have overlooked more than one case of stone in the bladder in such subjects—I don't know, but I fear I have. first one of the patients referred to, was one of the cases in which I had tried electricity—using an intense current after Apostol's plan. When I put my finger through the bladder on this prostate, which was literally as big as my fist, and had, along with this general hypertrophy, numerous, large and small, hard, nodular growths or tumors on its vesical surface, I felt how idle had been my efforts to do any good in this way, and I have put out of sight and out of reach my prostatic and vesical electrodes. If, after what I have said about them, any of you want to try them, I will cheerfully give them to you.

After you have exhausted the use of the catheter and palliative measures generally, you must open the bladder, let the urine drain away, and give the bladder and the man too a rest, which both sadly need. This is the only way by which you can possibly cure the cystitis and prevent disease from reaching the kidney. It is the only way by which you can stop the pain, or lessen the size of the prostate, or restore

that man to anything like his normal condition.

Now how to do this, is a very important question. The first time I operated for stone by the supra-pubic method, I was struck with the fact, that the bladder contracted, as soon as an opening was made in its anterior wall, with a force sufficient to drive out every drop of liquid it contained, and that there was no more need for drainage tubes after supra-pubic cystotomy than there was after perineal lithotomy. The bladder is not an inactive bag, as you would expect to find it in a dead or paralyzed body. Its

walls contain elastic and muscular forces, which, in the natural state, are resisted by the same kind of structures at its outlet: but when an artificial opening is made in the bladder at any point, the muscular and elastic tissues in the walls of this organ, contract and keep the viscus empty of any fluid. Recognizing this fact, I abandoned drainage tubes after supra-pubic cystotomy, as after many years we were all led to do after perineal section for stone. was this principle that led me to attempt the formation of an artificial urethra for prostatic hypertrophy. The operation is very simple.* You inflate the rectum with a rubber bag, which pushes the bladder up above the pelvic brim and inject the bladder to make it prominent. Cut in the median line through the skin and superficial fascia, from the symphysis pubis to a point three inches above. Separate with the handle of your knife the recti muscles, cut through the transversalis fascia, upon a grooved director; then again using the handle of the knife, go through the fat and loose cellular tissue in front of the bladder. Catch this organ, now exposed to view, with a tenaculum and open it with the point of your knife; carry your finger into the bladder and examine it. Open the bladder as low down as you safely can, not higher than the top of the pubes; let the water out of the rectal bag and remove it. The bladder will then fall back into the cavity of the pelvis. Take one or two stitches in the lower part of the wound through the skin. Don't include the muscles in your sutures. When completed, this opening in the bladder should be as low down as you can get it, and the opening in the skin at the upper end of the incision. For several hours, to permit the wound to glaze, and for the sake of cleanliness, I use a large drainage tube through this track. Keep the urine acid, for acid urine is aseptic, and this is the nearest approach to antiseptic dressing that you can get in cystotomy. The urine will drain as it is formed through the wound, if all goes well for about two weeks, when the opening will be reduced to a fistulous track which will admit a good sized bougie, say 10 to 12 A. S. Now the man will begin to pass water through the fistula at will. He can retain the water, two, three or four hours—in one of my cases as long as long six hours—without dribbling, and pass it when he desires. The fistula does not leak, no matter what the position of his body, unless he contracts his bladder to make water, or the

^{*}This operation is described fully in the October number of the Virginia Medical Monthly, by Dr. McGuire.

urine accumulates to a point above the level of the top of the fistula. If the operation is properly performed, the fistula should be two and one-half to three and one-half inches long, and occupies the same relation to the bladder that the

spout of a coffee-pot does to the bowl.

The operation is so simple; comparatively so free from danger; involves no important blood-vessels or nerves; is made at a safe distance from the peritoneum, and requires for its execution only a knife, pair of forceps, tenaculum and grooved directors—indeed, if carefully done, I have found it so safe that I do not hesitate to perform it in cases of disease of the bladder, where the diagnosis is difficult or impossible, simply that I may explore the bladder. If a laparotomy for diagnostic purposes is justifiable, the much less hazardous undertaking of making a supra-pubic cystotomy for the same purpose, is certainly so. Of course, you must do the operation right. You will at least do this good: drain the bladder and put it at rest, which is worth more in cystitis in one day, than any drug or set of drugs would be worth in a week. It is astonishing to see how soon the patient begins to improve after the opening is made. The urine soon becomes free from the mucus, pus and blood, which it formerly contained in such abundance. The vesical tenesmus and irritability rapidly pass away. In one of my cases, a man sixty-nine years old, so feeble that he could unaided barely walk across the room, and reduced almost to a skeleton, in six weeks fattened fifteen pounds, and could walk two or three miles without fatigue. This man got out of bed in sixteen days after being cut, and soon after went about his business, wearing over the opening, to prevent chafing, a bit of absorbent cotton. In my cases, I have had, for the first two months, no trouble to keep the artificial track open. If the obstruction at the neck of the bladder is great, you need not expect the fistula to close at an early day, even if you introduce nothing into it, but at about the end of eight weeks, the prostate will diminish in size, all congestions and inflammations will disappear, and nature will now make an effort to send the water through the natural urethra and close up the artificial one. In the case just referred to, at the end of eight weeks, the man got up one morning, made an attempt to pass the urine through the artificial track, which was temporarily closed by a clot of mucus, and, to his surprise, found the urine passing through the natural urethra. This was the first water that he had voided in that way for more

than three years. Another interesting fact in regard to this patient: For the first time for ten years he has had a return of some sexual desire and power. All this goes to show the improvement which has taken place about the neck of his bladder. But at the end of eight or ten weeks this track must be kept open by the use of bougies, or by the introduction of a silver or hard-rubber plug as long as the artificial urethra and about the size of a No. 8 or 10 bougie. This should be kept in one hour or more every day. In this way the artificial urethra can be kept from closing until the natural outlet is unobstructed.

The next of order of business being the

Election of Officers for the Incoming Annual Term,
The following were duly elected by ballot:—
President.—Dr. E. W. Row, of Orange, Va.

Vice Presidents.—Drs. Wm. S. Christian, of Urbanna, George S. Luck, of Roanoke, and L. Ashton, of Falmouth. Recording Secretary.—Dr. Landon B. Edwards, of Rich-

mond, Va.

Corresponding Secretary.—Dr. J. F. Winn, of Richmond, Va.

Treasurer.—Dr. R. T. Styll, of Hollins, Roanoke county, Va.

Committee on Application for Fellowship at Annual Session, 1889.—Drs. Wm. D. Turner, of Fergusson's Wharf; R. M. Slaughter, of Theological Seminary; I. S. Stone, of Lincoln, and Alfred S. Rixey, of Culpeper, and John Clopton,

of Williamsburg.

Executive Committee.—Drs. Wm. W. Parker, of Richmond; Hon. Fellow J. Herbert Claiborne, of Petersburg; Jacob Michaux, of Richmond; L. Lankford, of Norfolk, and Hon. Fellow Dr. Hunter McGuire, of Richmond. The Recording Secretary and the Treasurer are ex-officio members.

Committee on Publication.—Drs. C. W. P. Brock, George Ross, and Hugh M. Taylor, each of Richmond, Va. The Recording Secretary and Treasurer are ex-officio members.

Necrological Committee.—Hon Fellow, Dr. J. Edgar Chan-

cellor, of University of Virginia, Chairman.

To Deliver the Annual Address to the Public and Profession, Session, 1889.—Dr. Thomas J. Moore, of Richmond, Va.

Subject for General Discussion during Annual Session, 1889.
—Croupous Pneumonia.

-Croupous Fneumonia

Leader in this Discussion.—Dr. B. L. Winston, of Hanover, C. H., Va.

Place of Annual Session. 1889.—Roanoke, Va.

Time of Annual Session, 1889.—About September, 3rd—the exact date to be definitely fixed and announced by the Executive Committee some months hence.

The next order of business being the

Nomination to the Governor of Members of the Medical Examining Board of Virginia, to serve for the Regular Term of Four Years, Beginning January, 1st, 1889,

Honorary Fellow, Dr. J. Edgar Chancellor, of University

of Virginia, introduced the following resolution:

Resolved, That the Medical Society of Virginia, desirous of showing their appreciation of the work performed by the Medical Examining Board of Virginia for the last term of four years, to terminate December, 31st, 1888, nominate each of the thirty-two regular physicians now representing the Society on that Board, and recommend to the Governor of Virginia to issue commissions in due form to each of those so nominated to serve for the regular term of four years, beginning January 1st, 1889, as members of the Board.

Dr. J. S. Dorsey Cullen, of Richmond, Dr. L. Ashton, of Falmouth, Dr. Wm. C. Dabney, of the University of Virginia, and others seconded the resolution, which was afterwards unanimously adopted. Hence the following are the thirty-two gentlemen of the regular profession who are to compose the Board of Medical Examiners of Virginia for the term of four years, beginning January 1st, 1889.

[See next page for Medical Examining Board elect.]

THURSDAY—MORNING—OCTOBER 25th.

The Corresponding Secretary, Dr. J. F. Winn, of Richmond, Va., presented a circular-letter from the Publication Committee having charge of the revision of the United States Pharmacopæia, requesting this State Society, in common with every other State Medical Organization, etc., to appoint a committee of three members to act with the Publication Committee of the American Pharmaceutical Association in perfecting the revision of the volume to be issued in 1890.

Dr. R. M. Slaughter, of Theological Seminary, Va., moved that the request be complied with, and that a committee of three be appointed by this Society. Carried. The President appointed Drs. R. M. Slaughter, W. B. Towles, of University of Virginia, and John N. Upshur, of Richmond, Va.

The Treasurer, Dr. Richard T. Styll, of Hollins', Roanoke county, Va., presented his report for the year just ended,

012	PROCEEDINGS OF SOCIETIES.
COUNTIES COMPOSING RESPECTIVE CONGRESSIONAL DISTRICTS.	Accomac, Northampton, Northumberland, Westmoreland, Richmond, Lancaster, Matthews, Middlesex, Gloucester, Essex, King and Queen, Caroline and Spottsylvania. Princess Anne, Norfolk, Nansemond, Southampton, Isle of Wight, Surry, Elizabeth City, Warwick, York, James City, and Charles City. Henrico, New Kent, King William, Hanover, Goochland, and Chestefield. Prince George, Sussex, Greenville, Brunswick, Dinwiddie, Powhatan, Amelia, Nottoway, Prince Edward, Lunenburg, and Mecklenburg. Pittsylvania, Henry, Franklin, Patrick, Floyd, Carroll, and Grayson. Halifax, Charlotte, Campbell, Bedford, Botetourt, Roanoke, and Montgomery. Frederick, Clarke, Shenandoah, Warren, Page, Rockingham, Rappaliannock, Madison, Greene, and Albemarle. Loudoun, Fairfax, Alexandria, Prince William, Fauquier, Stafford, King George, Culpeper, Orange, and Louisa. Lee, Scott, Wise, Dickenson, Buchanan, Tazewell, Russell, Washington, Smyth, Bland, Wythe, Pulaski, Giles, and Craig. Highland, Augusta, Bath, Alleghany, Rockbridge, Nelson, Amherst, Appomattox, Buckingham, Fluvanna, and Cumberland.
NAMES, POST-OFFICES AND DISTRICTS.	T. I. Moore, Richmond, Va. 1. S. Stone, Lincoln, Va. 2. W. Carmichael, Fredericksburg, Va. 2. W. Carmichael, Fredericksburg, Va. 3. W. Carmichael, Fredericksburg, Va. 4. W. W. Douglas, Warsaw, Va. 1. See H. Peek, Hampton, Va. 1. See H. Peek, Hampton, Va. 1. J. Hewis, Richmond, Va. 2. G. Cong. 1. Herbert Claiborne, Petersburg, Va. 2. Hugh M. Taylor, Richmond, Va. 3. Herbert Claiborne, Petersburg, Va. 4. Hong. 4. H. Cong. 5. Harris, Blackstone, Va. 7. Herbert Claiborne, Petersburg, Va. 8. W. J. Harris, Blackstone, Va. 8. Greer, Rocky Mount, Va. 9. H. Cong. 9. Trent Clarke, South Boston, Va. 11. Grey Latham, Lynchburg, Va. 12. Greer, Rocky Mount, Va. 13. Greer, Rocky Mount, Va. 14. Grey Latham, Lynchburg, Va. 15. H. Neff, Harrisonburg, Va. 16. Groway, Rapidan, Va. 17. Hold, I. Treston, Marion, Va. 18. Hold, T. Nelson, Charlottesville, Va. 19. Hugh T. Nelson, Charlottesville, Va. 20. C. Conway, Rapidan, Va. 3. Hedford Brown, Alexandria, Va. 4. Robert J. Preston, Marion, Va. 4. Robert J. Preston, Marion, Va. 5. J. Walker, Brownsburg, Va. 17. M. Patterson, Staunton, Va. 18. M. Patterson, Staunton, Va. 19. H. M. Patterson, Staunton, Va. 19. H. M. Patterson, Staunton, Va. 10. Meriwether, Green Forest, Va. 11. Grey D. Meriwether, Green Forest, Va. 12. J. Walker, Brownsburg, Va. 13. Cong.

showing a balance in the treasury of \$229.18. The report

was duly audited by a committee, and adopted.

Instead of a formal "Report on Advances in Surgery," to which task Dr. Wm. Edward McGuire, of Richmond, Va., had been assigned, he read a paper on

Pathogenic Germs or Microbes and Some Conditions Relating to Infection.

The "pathogenic micrococci" of chief interest to the surgeon are those of open wounds, such, for instance, as the micrococcus of syphilis, gonorrhea, acute infections, osteomyelitis, progressive necrosis, etc. The "pathogenesis bacilli" are those of syphilis, tubercle, tetanus, anthrax, ulcerative stomatitis, etc. The baneful influences exerted by these organisms on living bodies have been explained in four ways: (1) Acting as an invading army, they destroy the raw food of the weaker inhabitants—the tissue cells—which require more complex bodies for their assimilation; or (2), they interfere with the due performance of the depurating organ, and produce disease by preventing the elimination of urea and other final products of repressive metamorphosis; or (3), as microbes, along with all living beings, produce excretions, and this excretion is discharged into the body of the animal in which the microbes live, it would produce deleterious effects as certainly as if the animal's excretion had been retained; or (4), as is most generally accepted, the injurious effects produced by microbes is not due to what they take or excrete, but to what they leave; and this is associated with the demand they make for the oxygen of the tissues. Living and multiplying without direct exposure to air, they obtain their required oxygen from the tissue by which they are surrounded; and when oxygen is withdrawn from such complex chemical compounds as our tissues are composed of, the elements enter into new and abnormal combinations (ptomaines) which are believed to be really poisonous agents. Depression of vitality of the part attacked is an important factor in the process of infection. An essential condition in the production of local depression is inflammation. Practically, the micro-organisms enter the body in the first stage of inflammation. Much depends on the part of the body exposed to infection—some micro-organisms infecting only one part, and others another part. Pettenkoffer believes that everything that increases the amount of water in the blood predisposes the individual to infectious diseases.

The next paper was by Dr. Milton Josiah Roberts, of New York city, which was read by invitation. Its title was:

"Treatment of Spinal Diseases, Deformities and Disabilities by Means of the Hand Woven Wire Corset and other Mechanical Adjuvants. Report of Cases and Exhibition of Apparatus."

In again calling the attention of the profession to this system of treatment, Dr. Roberts stated that it would be his object: (1) To elaborate more thoroughly some points touched upon in his former paper. (2) To bring up for consideration additional important points. (3) To call attention to some novel mechanical adjuvants used in the treatment of spinal affections. (4) To present some clinical and other data showing the practical advantages of this system over all other plans of treatment. (5) To make an actual demonstration of the technical points involved in making a mould of the body, and a cast from this mould over which the corset is to be woven, specifications to be given to the instrument-maker for the construction of a hand woven wire corset, and the application of the same to the person of the patient.

Among the important advantages of the hand woven wire corset for the treatment of spinal affections may be

mentioned:

1. Its superiority over all other forms of spinal props in affording upward sustentation of the body.

2. It affords perfect ventilation of the body.

3. Its comfortableness is secured, not by the use of pads, but by the equitable distribution of pressure incident to the movements of the body, over the widest possible area, in oblique right lines.

4. It affords easy respiration with continuous support.5. It yields to the movements of the body without im-

pairing its supporting qualities.

6. It is absolutely cleanly, as it has no absorbing surfaces.

7. It is durable.

8. It is inconspicuous and elegant.

9. It permits of the inspection of all underlying parts.

10. It can be readily altered and repaired.11. It is easily removed and re-applied.

12. Its construction permits of increasing its stiffness over certain areas where increased support is required with-

out perceptibly increasing its bulk or making it more cumbersome.

13. It possesses the widest range of adaptability to the wants of individual cases of any spinal support which has been placed at the disposal of the profession

been placed at the disposal of the profession.

14. Patients can be accurately fitted with woven wire corsets, no matter how great their deformities may be, at any distance whatsoever from the seat of manufacture.

15. It is the best adapted of all spinal supports to be used conjointly with other supports for the extremities.

Dr. Roberts read a number of letters from prominent members of the medical profession indorsing in the most

emphatic manner all that he claims for his corset.

Among the novel mechanical adjuvants which Dr. Roberts called attention to and exhibited may be mentioned the suspension tricycle, elastic tension hip splint attached to corset, inconspicuous ring head rest attached to corset, inconspicuous elastic tension head rest attached to corset, folding baby chair with head rest attachment for making linear traction on the spine, spinal suspension gymnasium, spinal traction attachment to Dr. Kitchen's health jolting chair, etc.

After the reading of his paper, Dr. Roberts made a practical demonstration before the Society of the correct method of moulding the body, of making a cast from this mould, of making the necessary specifications to the instrument maker for the construction of a woven wire spinal corset, and finally he applied one of his woven wire spinal corsets with head rest attached to a patient suffering from spinal caries.

Under call for "Reports in Chemistry, Pharmacy, Materia Medica and Therapeutics," the chairman, Dr. R. A. Lewis, of Richmond, Va., presented the report, prepared by Dr. Joseph M. Whitfield, lately of Richmond, but now resigned and removed to New York, on

Advances in Chemistry.

Organic chemistry is the special branch of chemical study at present. Incompatibilities should be better known by physicians. Thus, iodol is incompatible with yellow oxide of mercury, and yet with those unfamiliar with chemistry, such a prescription is often written for an ointment. But in a week's time the neat-looking, yellow, homogenous ointment changes to a dirty, grayish mixture. The trouble is the excess of iodine in the iodol is given off and decomposes the yellow mercuric oxide. Saccharine or saccharinic acid, the

39

sweetest of all known substances, belongs to the group of coal-tar products, and is antiseptic. It is claimed also that it acts directly on the fourth ventricle, and thereby diminishes the amount of sugar produced in the system. It is a boon to diabetics having the proverbial "sweet tooth." It is dispensed in half to one-grain tablets. One grain will make a cup of coffee too sweet for most persons. It combines readily with most alkaloids, such as quinia, morphia, cocaine, etc. As it prevents fermentation, it is used in gastric and intestinal disorders

Cocaine saccharinate is about four-fifths the strength of cocaine muriate, but has no bitter taste. Antipyrin and antifebrin are noted as derived from amilide. Antipyrin is a proprietary drug, and cases of poisoning have been reported; but no case of poisoning by antifebrine has yet come to light, nor does it interfere with the digestive tract as does antipyrin. Besides, its effects in smaller doses last longer; it stimulates rather than depresses the vaso-motor and muscular systems; it has no after effects, and is very much cheaper. Antipyrin is strongly recommended as a prompt hæmastatic, leaving the wound clean. Phtalates are salts formed by the action of the organic acid—phtalic acid—on vegetable alkaloids. The special advantages claimed for these salts are their great solubility and stability. Sulphonal, an oxidation product of ethylmercaptan with acetone, is tasteless and colorless, and crystallizes in large tablets, is easily soluble in alcohol and in two parts of water. It is hypnotic in doses of from gr. xx-xxx. Amylene hydrate, or di-methyl-ethyl-carbynal, is a tertiary amylic alcohol—a clear liquid having an ethereal odor, and a camphor-like taste. It ranks between chloral and paraldehyde as a hypnotic. It is safer than chloral, as it does not depress the heart or respiratory centres, and has not the nauseous taste, nor does it cause the disagreeable eructations of paral-Urethane, or ethyl-urethane, produces sleep like normal sleep, leaves no headache nor gastric disturbance, and only slightly slows the pulse. It is soluble in water, and its taste is not unpleasant. Dose for infant from twelve to eighteen months old, about fourteen grains. Menthol, or peppermint camphor, a soluble crystalline salt, looking like Epsom salts, deposited when Chinese oil of peppermint is exposed to cold, forming stearoptine of peppermint oil. It equals thymol as an antiseptic, and hence its use in diphtheria, typhoid and scarlet fevers, etc. After some notes about cocaine, jambul seed is mentioned as a new treatment

for diabetes mellitus. Dose of the fluid extract of the seeds, from five to ten minims. Succinimide of mercury for hypodermic purposes seems to be a valuable preparation. It is a white, silky powder, prepared by heating together ammonia and succinic anhydride, and then adding mercuric oxide. It is very soluble in water, and the solution is a permanent one. It is cheap.

Dr. H. Rolfe Dupuy, of Norfolk, Va., made the

Report on Advances in Materia Medica and Therapeutics.

He reviewed the literature of the past year on new remedies and therapeutic agencies, calling especial attention to the two great antipyretics—antipyrin and antifebrin—showing their use and abuse, and the particular indications of each, claiming for the latter the greatest and most varied use. Strophanthus was urged as the great heart tonic, particularly when used in connection with ether and also with nux vomica. Attention was called to the great value of ichthyol in skin diseases and rheumatic pains. Salicylate of ammonia was reviewed in extenso in connection with the treatment of typhoid and remittent fevers. Salol, sulphenol, spartein, and other new remedies came in for attention. In conclusion he condemned the use, by physicians, of proprietary preparations that did not publish a working formula.

Dr. Lewis G. Pedigo, of Roanoke, Va., read a paper en-

titled:

Antagonism Between Amyl Nitrite and Prussic Acid.

After certain preliminaries, he gave an account of three representative experiments out of a series that he had performed on lower animals, illustrating the use of amyl nitrite by inhalation as a treatment for prussic acid poisoning. The experiments consisted in administering the poison in large doses hypodermatically, and beginning the use of the antidote at once by inhalation. Collateral experiments were reviewed, in which the poison was given in equal or smaller doses, and the antidote withheld. fects were observed and compared, always showing a remarkably heavy balance in favor of the remedy. In one of these experiments a dog's life was saved by the use of the nitrite of amyl from the action of the same dose which had just killed a similar dog in five minutes and fifteen seconds, without treatment. In commenting on the experiments, a theory was evolved to explain the action and antagonism of the two drugs. The convulsions and arterial spasm of prussic acid poisoning were attributed to paralysis of the inhibitory nerve-centres. The relief of these symptoms by nitrite of amyl was accounted for on the supposition that this drug stimulates those centres. The two drugs were shown to antagonize each other in six distinct physiological items, thus proving the amyl to be a more nearly perfect physiological antidote to prussic acid, than is known for any other poison. He suggests the use of the same remedy in cases of poisoning by other cardiac depressants, and enumerated aconite, veratrum viride and gelseminum.

The following is an abstract of the

Report on Advances in Physiology.

Dr. Charles M. Blackford (removed to New York city) called attention to the fourth morphological character in the blood, the elementary granules of Beale and Zimmerman. These minute corpuscles appear in microscopic preparations of blood that have been allowed to stand for some time and are of unknown origin. It is thought that they are protoplasmic masses detached from leucocytes. In the physiology of coagulation, he brought forward the view of Hammarsten that fibringen alone, acted on by the fibrin forming ferment in the presence of NaCl would produce fibrin, and combined with it the hypothesis of Prof. Osler that the "hæmatoblasts" of Hayem may furnish the ferment. development of the corpuscles is briefly touched upon, the results of observations of Ranvier being cited. According to this authority the red corpuscles are developed from spindle shaped cells that he styles "vaso-formative cells" and which he has studied in the omentum of young rats. Under the head of digestion, the result of the studies of Dr. Sternberg on the effects produced by bacteria in the mouth was given. In some cases toxic effects have followed bites by persons not affected with hydrophobia, and this is due to micro-organisms in the saliva. Pasteur has done some work in the same line. Some of these dissolved albumen, some fibrin, while others acted as alcohol making ferments. The ptomaines resulting from the action of the bacteria of decomposition found in the alimentary canal, would produce poisoning unless destroyed, and Roger, of Paris, affirms this to be a function of the liver. Lauder Brunton says that the bile is not always bitter, but owes its taste to the contained alkaloids. He suggests that the symptoms of jaundice may really be due to these retained alkaloids. A passing notice of the protective mechanism of the digestive organs was next. The stomach is protected by the alkalinity of

the blood, for when the blood supply is cut off from a part

of its surface, self-digestion begins at that point.

Trypsin is secreted as zymogen and only becomes trypsin by combination with oxygen, which combination does not occur till the duodenum is reached. By this chemical process the pancreas is protected, for the alkaline blood would give the most favorable condition for the activity of the ferment if it existed in the organ. The intestine is protected by the layer of precipitated peptones which bathes the villi. Under the head of neurology, a sketch was given of the localization of the sensory centers and details of some of the experiments by which these were determined. The physiology of the conditions of "soul-deafness" and "soul-blindness" as they are called by Monk was given, the lesion in the latter being in the cortex of the occipital lobe and in the former in the first and second temporo-sphenoidal convolutions.

FOURTH DAY—FRIDAY MORNING—October 26th.

After the meeting was called to order by the President at 10:30 A. M., on call for reports, etc., Dr. Randolph Barksdale, of Petersburg, Va., read a

Report on Psychology and Neurology.

He sketched the history of the treatment of insanity. Over 2,000 years ago, insanity was believed to be possession by the devil, and the treatment was directed towards driving the devil out and punishment of the person for letting the devil get control of him. Hippocrates was the first to cast off such superstition, and announced that insanity was the result of disease of the brain; that the mind—the soul -could not be diseased. And his doctrines prevailed and resulted in improved treatment. But after the Fall of the Roman Empire, these doctrines passed away; and again the insane became the victims of persecution and of punish-And it was not until 1795 that Pinel inaugurated the reformation in treatment which prevails to this day. He announced that insanity is a disease, and the insane are therefore entitled to all the care and tenderness of the skilled physician and nurse. From year to year since then, steps have been taken looking to improved treatment of insanity as of other diseases. Under the head of Neurology, Dr. Barksdale refers to some of the approved uses of electricity in medicine, and also notes approvingly some of the statements of Dr. Seguin, etc., regarding the localization of cerebral centres—their practical bearing being the assistance such information may give the surgeon in selecting the site for his trephine in obscure brain injuries or diseases.

In response to numerous calls upon Invited Guest, Dr. John B. Hamilton, of Washington, D. C., Surgeon-General United States Marine Hospital Service, he said that he could not hope to say anything in the nature of *instruction* to this old and distinguished association, especially as what he may say is entirely unpremeditated and without preparation. But in epidemiology, *history* is always interesting, and he will therefore briefly give the

Outline History of the Epidemic of Yellow Fever now Existing in the State of Florida.

Last year the yellow fever appeared in Key West in the family of a restaurant keeper by the name of Baker. It appears that a family of Bolios, who had kept hotel in Havana in various places, the last being called the Quanta-Avenida (Fifth Avenue Hotel), unfortunately for Florida, emigrated to Kev West. Their household effects, under the regulations governing the regular lines of steamers, could not be shipped by them; so they shipped these effects, consisting of bedding and various articles of furniture, by an irregular "tramp," not now running, called the "Cochran." There was no objection officially made at Key West, as there were neither government nor local quarantine, and these were landed and stored above Baker's restaurant. Baker family died of the fever, and thus the fever started and rapidly became epidemic. The Government, under the operation of that section of the statutes forbidding interference with local authorities, did nothing, except, on request of the Governor to aid the local board, established a dispensary and paid the expenses of the city hospital. enable the speedy depopulation of the city, a refuge camp was established at Egmont Key, at the mouth of Tampa bay. No case from Egmont communicated the disease.

The first cases in Tampa were kept secret from August to October 21. A family of Italians by the name of Turk, fruit dealers, brought the fever into Tampa. The steamers had refused, under orders from the Hillsborough County Board of Health, to bring fruit from Havana or Key West. These Italians finding it impossible to continue in business, set up a smuggling line and brought fruit by way of Punta Gorda Bay, and overland to Tampa. For this purpose the man Turk and his assistant Peep or "Pete," made frequent surreptitious visits to Key West while the disease was there

epidemic, and blankets were purchased in the infected city, and used while on the overland trip and brought to Tampa. It is a significant fact that the whole family of the Italians were the first taken sick, that they were not publicly known to have been out of the town, although the fact is now known. The measures taken by the Government were simply to conform to the wishes of the Governor to aid the Hillsborough County Board of Health. The duty of preventing the spread of the disease was undertaken by the Florida State Protective Association, an organization consisting of one representative from each county Board of Health under the presidency of Dr. King Wyley, of Sanford. In December the association raised the quarantine against Tampa; the County Board of Health asserted that the disease had disappeared, but unfortunately the disease had not been stamped out, and although the cases of fever lingered all Winter in Tampa its existence there was bitterly denied.

From Tampa the disease spread to Plant City, Manatee and other places, and it is now believed that the fever was at Jacksonville as early as February. Dr. Guitiras, of the Marine Hospital Service, an acknowledged expert, says that in his judgment at least two of the cases of "society fever," of which there were over thirty reported in Jacksonville in that month, had the well marked clinical history of yellow fever. Nine of these cases died. Dr. Potts treated cases in Bay street in June, and there were probably cases continuously until the formal announcement was made.

So called isolated cases were reported in Jacksonville after the case in Bay street had been treated in June by Dr. Potts, but the local authorities denied the presence of an epidemic and placed a guard around each case. This state of things existed until August the 26th, when the spread of the disease in Jacksonville became so great, cases springing up at various points in the city, that could not be traced to any of the so-called isolated cases, that the authorities had to

declare the disease epidemic.

The disease was introduced in Decatur, Alabama, by a man who had gone from Jacksonville while all of the cases in that city had been reported under guard. His ticket had been from some point outside of the infected city, and

consequently he was not denied admittance.

The fever was introduced in Gainesville and Fernandina by base-ball players who had played a game of ball in Jacksonville before the epidemic nature of the disease had been declared and then returned to these cities. He then went on to explain the Government work at Camp Perry, and said that since its establishment, there had been only one death from yellow fever in the fever hospital at the Camp. He said that the experience of the physicians at the Camp went to show that five days was the incubative period, and that when persons had been in the Camp for that length of time and did not develop the disease, there was no danger of their having it; no person having spent ten days in the Camp had developed the fever after leaving the station.

He spoke of the lack of local inspection at Tampa where the disease first appeared this season, and said that if the first cases had been reported, there would probably have been no epidemic; and he also said that he had proof to show that, when the case of McCormack was reported as the first in Jacksonville, the fever was even then epidemic.

demic.

He also stated that while the fever was raging at Key West, he, at the request of several health officers, had prepared a bill providing for the establishment of a State Board of Health, but it was laid on the table by the Florida Legislature through motives of false economy.

He concluded by saying that the inspection of Florida cities, ordered by the Government, had developed the fact that the yellow fever was epidemic in both Enterprise and

Fernandina.

Dr. Wm. D. Hooper, of Liberty, Va., in his Report on the Advance in the Practice of Medicine,

Gave a running account of the progress of the germ theory, in the last twelve months, saying the advance had been in rather a "retrograde" direction as Sternburg proves Freire's inoculations for yellow fever are a failure; and M. Gibier has not discovered the true germ of that disease, but thinks he himself has. Pasteur's patients are dying of hydrophobia, but Koch is more fortunate with his bacillus as it was accepted as true by a recent Congress for the study of tuburculosis which met in Paris. Pasteur thinks M. Gamalier, of Odessa, has discovered a true inoculation for cholera, and referred his communication to the prize committee of the Academy of Sciences. The Reporter also gave a description of a new method of treating ulcerated bladder with prostatic enlargement by repeated irrigations of that organ with warm salt water, holding iodoform in suspension. He uses for the purpose a Y shaped tube five inches long, attaching the tube of a fountain syringe to one of the short arms and

a rubber tube to the other while the long arm of the tube is inserted into the catheter. He reported two cases—the first aged 78 years, relieved on his death bed when all other means had failed; the second aged 75 perfectly cured, as he now sleeps all night without emptying his bladder, and rides horse-back during the day.

Mysticism in the Developments of Medicine

Was the title of a paper presented by Dr. M. A. Rust, of Richmond, Va., of which the following epitome is made:

The science of medicine to-day embraces surgery as well as medicine. The modern surgeon is a scientific physician endowed with manual skill. But surgery and medicine have not developed from the same germ. Traumatic injuries must needs have engaged our progenitor's attention at an epoch when brain evolution was not so far advanced as to enable them to take cognizance of internal disturbances. Thus, we likewise see our domestic animals bestow some kind of treatment on external injuries. Now, if we follow surgical art through all its stages, we shall find its work

ever to be tangible work, ever free from mystery.

It is different in regard to internal diseases. As soon as brain evolution had reached the point of manifesting itself by some kind of reason or thought, the internal functional disturbance, for which no visible cause existed, was attributed to the action of some occult and supernatural power. Wherever we meet man, even in the lowest state of savagery, we find the idea of this power evolved. Primitive man, as little as the savage of to-day, was capable of dealing with it. But there arose a particular class of men endowed with superhuman qualities and fitted for interposing between mankind and good and evil spirits. Priestcraft and healing art coalesced into one and the same sacred profession of which the actually existing and ministering medicine man in the Indian territory, or on the banks of the Congo, is a living prototype. The healing art still bears the vestiges of its descent; there still exists a faint family likeness between the professional healer and the medicine man, priest, sorcerer or juggler.

The mysticism of mediæval medicine took shape and color through the coöperation of various factors. Foremost stands the Judiac-Christian devil,* who followed in the wake of advancing and triumphant Christianity. Whereever the cross was planted, there the upas tree of diabolism,

^{*}In our December No. Dr. Rust promises to present a Biographical sketch of the Devil.

of demoniacal nosolgy, of pathology, and therapeutics of witchcraft developed and branched out into gigantic dimensions, infecting christianity with a most baneful mental

epidemic.

Whilst surgery was left in the hands of the barbersurgeon, the healing art became the monopoly of monks and priests; Theurgy, Thaumaturgy were all-pervading. Even, when after the revival of letters and the foundation of universities, the healing monopoly had been wrenched from the priestly grasp, mysticism continued to cleave to the

healing art, and is, as yet, not entirely extinct.

At a time, when among the generality of men, an allembracing culture is advancing with long and rapid strides, the field of the knowledge of life and health still lies overgrown with the weeds of superstition, and darkened by the fogs of ignorance. The implicit belief in drugs of all sorts, from all sources, is still unshaken, the appetite for nostrums insatiable, the magnitude of the consumption appalling, the consequences, in many instances, disastrous. Disease is regarded as an inimical entity which has to be fought with all earthly and unearthly weapons; for every special disease. an herb 'or a mineral must exist that heals the disease: greatness is bestowed upon the healer who can make the greatest fuss and stir. Withal, the relations of surroundings to health and life, the simplest hygienic rules are ignored or recklessly disregarded. However, the time is fast approaching when hygienic and preventive medicine will supersede the methods of the old healing art, when the physician will minister as a public functionary of the highest order, invested with the guardianship of the wellbeing and happiness of the human race, present and future.

Before this change can take place, public opinion must be educated, man must be awakened to the momentous cogitation that he holds in his hands the power over his own destiny and the destiny of his offspring. It is the physician, and the physician only, who can lift public conceptions of life, health, and disease to this higher level. In order to fulfil his vocation of educating the public, of controlling and regulating the relations between human life and the outer world, he must acquire an exhaustive knowledge of all the surroundings of man—a knowledge of the whole of nature. Without it he must disastrously fail. No doubt, the scent of burnt offerings operates propitiously on the gods. But, says Goethe, "If the priest has a cold in the head,

the gods cannot smell."

Dr. William W. Parker, of Richmond, Va., presented a paper entitled

What is the Duty of a Doctor to His Patient Suffering Under Malignant Disease?

The following are the conclusions he draws from his dis-

cussion of the subject:

1. In the treatment of cancer and other necessarily fatal diseases, it is the duty of the doctor to mislead and deceive as long as he can his patient, as to the nature and fatal ending of his disease.

2. It is also his duty in other maladies not fatal often to deceive his patient, both as to the medicine used, and also as to his real opinion of the case. Such deception is also of

daily occurrence and is practised by all doctors.

3. This mode of proceeding is not at all agreeable to the doctor, and is a great strain upon his nervous system, and the only motive for it must be the good of his patient.

4. Deception has been always recognized as lawful and right in war, and has been highly commended by the wisest

men.

5. In this deception, both in the case of the doctor and the general, the motive must be of the highest and most unselfish character.

6. In many of the great crises of life, one virtue has, for a time, to be in abeyance and yield to other virtues and duties. Human life is daily saved by withholding, if needful, by deceit, sad news, that would likely kill by shock.

7. It is plainly the duty of the doctor to prolong the life of his patient, and in every case and by all means in his

power to render him comfortable in body and mind.

8. That the utmost frankness should be practised by the doctor in his intercourse with the sick man's friends is demanded alike by regard for his own reputation as well as the rights of his patient.

9. It is the doctor's duty in all cases of malignant disease

to consent to consultation, if not to suggest it.

- 10. Hope is one of the most precious instincts or faculties of the soul, and it is the doctor's duty to cherish it to the last; as every patient has the "desire" to live, the "expectation," the other element of hope, must be cultivated by the doctor.
- 11. However desperate the case may be, it is the doctor's duty to stand by his patient and cheer him to the last.

The title of a suggestive and practical paper by Dr. C. E. Busey, of Lynchburg, Va., was the

Cultivation of Vocal Music in our Schools as One of the Means of Preventing Phthisis.

He states it as a well known fact that those nations which are given to the cultivation of vocal music are strong, vigorous races, with broad, expansive chests. If an hour a day was devoted in our public schools to the development of vocal music, there would not be the sad spectacle of the drooping, withered, hollow-chested, round shouldered children. There is too great a tendency to sacrifice physical health upon the altar of learning. Vocal music is gymnastic exercise of the lungs, producing increased expansion of the lung tissue itself. The lungs in improved breeds of cattle, which naturally take little exercise, and domiciled much of the time, are considerably reduced in size, when compared with those animals running at liberty; and so it is with the human race who lead inactive lives caused by civilization. Phthisis generally begins at the apices of the lungs because these parts are more inactive, and because the bronchial tubes are so arranged that they carry the inspired air with greater facility to the bases than to the apices. During inactivity a person will ordinarily breathe about 480 cubic inches of air per minute. If he will walk at the rate of six miles an hour, he will breathe 3,260 cubic inches. In singing, this increases more than in walking, as singing well requires all of the capacity of the lungs. The instructor of vocal music, in addition to his musical education, should understand the anatomy and physiology of the respiratory organs.

Etiology of the High Temperature of Pyrexia from the Standpoint of Modern Physics,

Was the title of a paper read by Dr. R. C. Powell, of Alexandria, Va. After stating that no theory based wholly on demonstrated science has yet been offered to explain the high temperature in pyrexial diseases, and after reviewing a number of other theories, he presents the following propositions, which may be regarded as novel, and possibly heretical, but which he believes are in accordance with the teachings of Modern Physics:

1. The matter of the human body is identical with that of the world around us, and the forces of the human body are the same as those of inorganic nature. This body, as a piece of mechanism, is more perfect than any other ap-

paratus for the transformation and distribution of energy with which it is supplied, but possesses no creative power.

2. The relation between combustion and heat is coincidental, and not causal. If heat is the result of collision between carbon atoms and oxygen atoms, this collision must precede that intimate union of such atoms which is termed combustion; and as the effect can never precede the cause, heat cannot possibly be the effect of combustion.

3. The oxidation of tissues *cannot* be exaggerated by the presence of micro-organisms whose every existence is main-

tained by the absorption of oxygen from these tissues.

4. In all essential fevers, the pyrexia is probably due to in-

creased molecular motion.

5. The rapid waste of fatty tissue in fever is not so intimately connected with the production of heat as with the production of energy—some of which is manifested in the accelerated action of respiration and circulation.

6. In sympathetic pyrexia, heat is a form of energy which, by reason of traumatic lesions of the nervous system, is prohibited from expending itself in functional activity or motion, and is, therefore, transmuted into heat, which is the form most frequently assumed by transmutable energy.

7. The only rational way to treat essential fever is to destroy the cause of it; but for agents to accomplish this destruction, no enthusiastic search will be made until we repudiate the idea that the great object in the treatment of fever is to place the system in the most favorable condition for recuperation after the disease shall have run its course.

Dr. G. McDonald, of Union, West Va., in his

Report on Obstetrics,

Spoke of the value of asepsis and antiseptics in midwifery, repeating the precautions that have time and again been repeated in books, journals, etc. As to anæsthetics in labor, chloral hydrate, in 15-grain doses every half hour or so, is better during the early stages of labor than chloroform, which latter should be reserved for the final throes. The placenta is best expelled by *Crede's method*. It has been recommended to pack the cavity of the uterus with iodoform gauze in cases of post partum hæmorrhage, after failure of ergot, hot or cold injections, etc.; but as a rule, empty the uterus promptly and cause tonic contraction of the organ. In cases of placenta prævia, the tampon may undoubtedly be used to gain time for sufficient dilatation of the os uteri in order to use the hand, etc. When a case of occipito-posterior

position is seen before rupture of the membranes, and before the head and shoulders become impacted in the pelvis, introduce the aseptic hand, (patient under chloroform), catch the head between the fingers and thumb and rotate the occiput forward, when the labor may proceed as a normal case. In regard to face presentations when the chin falls into the hollow of the sacrum, bring the chin forward and hold it there until expelled. The Veit-Smellie method is advocated for delivery of the after coming head in breech cases. The importance of laparotomy, etc., in rare instances of obstetrics, is dwelt upon.

Dr. William L. Robinson, of Danville, Va., presented a

paper on the

Conduct of Enceinte Women Before and After Delivery.

In this paper he considers:

1. The causes and treatment of the nausea of pregnancy.

2. The effects of granulations of the cervix uteri and vagina before delivery, and the dangerous complications resulting therefrom during delivery.

3. The causes and treatment of constipation during preg-

nancy.

4. The proper hygienic and aseptic precautions that

should be taken before and after confinement.

5. The cause of post-partum pains unduly protracted, the dangers to be anticipated therefrom, and the proper means of correcting the trouble.

6. The causes of treatment of post-partum hemorrhage.

7. While antipyrin controls after pains, does it not unduly diminish the normal discharges?

8. Chorea of pregnancy, with citation of several interest-

ing cases.

Dr. George B. McCorkle, of Covington, Va., presented the

Report on Diseases of Women.

In regard to electricity for fibroids of the uterus, he presented the conclusions of Dr. Martin, of Chicago: That it is free from danger; is absolutely painless; it invariably checks excessive hemorrhage; it rapidly reduces the size of the tumors; stops neuralgic pains; it is based upon exact dosage of electricity. Electricity has proved likewise useful in removing tumors from the female breast in the practice of Dr. Garrett, of Berlin; it has also been useful in increasing milk in mother's breasts. Dr. Byford uses electricity in paralysis of the bladder after inflammation has subsided. Dr. Rockwell has successfully used it in amenorrhea. Even in a case of complete extrusion of the uterus, electricity has been suc-

cessfully used to retain the organ in place after its reposition. Operations seem to be taking the place of *pessaries*. Dilating and curetting the uterine cavity is again becoming very popular.

The report of Dr. Oscar Wiley, of Salem, Va., was on

Diseases of Children.

He remarked on the marked excitability of infants and children, and then stated that their diseases are greatly modified by the nervous impressibility of the subjects. The severity of symptoms, however, furnishes no safe guide as to the severity of disease. For instance, a convulsion, than which we have no more hideous symptom or sign, may be the result of a centric or eccentric lesion—it may be innocent in its effects, due entirely to an easily removable cause, or it may result from some organic changes which will increase from day to day in severity. Intercurrent complications have to be carefully watched for in diseases of children. Stress should be laid on the hygienic and dietetic habits. He closes with pertinent remarks on therapeutics of dieteics.

Dr. A. C. Palmer, of Norfolk, read a first rate

Report on Advances in Ophthalmology,

Dividing his paper systematically so as to speak of whatever concerned (1) the lids, lachrymal apparatus and orbit; (2) the cornea, conjunction and sclera; (3) accommodation, refraction and motor apparatus; (4) uveal tract, vitreous, aqueous and lenses; (5) retina and optic.

Dr. John T. Francis, of Norfolk, Va., presented the

Report on Otology and Laryngology.

He first speaks of pathology of aural vertigo, and then, with reference to the treatment of otorrhoa, says that lactic acid attacks only the fungous growths, and diminishes the secretion and causes the odor to disappear. Pilocarpin is recommended. Photoxylin (20 per cent. solution) closed the perforation in the membrana tympani. The ear is first syringed with boracic acid solution, and dries with absorbent cotton. Then paint the edges of the perforation several times until the perforation is covered. He reports a case of serious injury to the ear by simply syringing that organ for a purulent discharge. The rest of the report is on Laryngology—speaking mostly of laryngeal tumors, tracheotomy, chronic and atrophic rhinitis, hay fever, etc. Dr. Chas. M. Shields, of Richmond, Va., read a paper entitled Enlarged Tonsils—What Shall We Do With Them?

After a brief discussion of the necessity of removing hypertrophied tonsils, and answering in the negative the ques-

tion, "Can they be removed by the application of astringents, absorbents or mild caustics, or the hypodermic injection of ergotine, iodine, etc.?" Dr. Shields presented the comparative merits of the tonsillotome and galvano-cautery, stating that he now only uses the tonsillotome! in young children, or where the tonsils were of the soft variety, where there was no danger of hæmorrhage on account of the prompt contraction of the bloodvessels. He had never seen nor heard of fatal hæmorrhage following the amputation of the tonsils in children, for the same reason. In adults, where the tonsils were of the hard, fibrous variety, although dangerous hæmorrhage only occurred about once in 500 cases, he thought that risk sufficient to make us discard the tonsillotome if a safer and just as efficient method was at hand. The galvano-cautery fulfilled these indications. From four to eight sittings are sufficient to melt down large tonsils; he touches six or seven points at one sitting. If a ten per cent. solution of cocaine is first applied, patients do not complain of pain. He has observed no tendency to recurrence after removal by this method. Dr. Shields summed up as follows: In all cases except in young children, or where the tonsil is very soft, the galvanocautery method is to be preferred, because 1st, The tonsil can be more nearly restored to its normal proportion. 2nd. Irregularly shaped masses can be removed. 3rd, The effects seem to be more permanent. 4th, It is devoid of danger.

Dr. Joseph A. White, of Richmond, Va., read a paper on Improved Means of Diagnosis and Surgical Treatment of Nasal

and Throat Troubles, With Practical Remarks.

In this paper he described a number of new inventions made by himself—both original instruments and improvements in old ones. Those of chief importance, as he regards them, are: (1) Post-Nasal Speculum, or Self-Retaining Palate Retractor, which he has described in the Journal of the American Medical Association, and also in the Virginia Medical Monthly; (2) Self-Retaining Tongue Depressor, now presented for the first time to the profession; and (3) Ratchet Snare and Galvano-Cautery Handle described last month in the Philadelphia Medical News. The tongue depressor invented by Dr. White, once applied, cannot be displaced by motion of the patient's tongue, while it holds the tongue firmly pressed down on the floor of the mouth, exposing perfectly the pharyngeal wall, and allowing free use of the rhinoscopic mirror whilst the post-nasal specular is in position.

Analyses, Selections, etq.

Reed & Carnrick's Soluble Food.

In the Boston Medical and Surgical Journal of August 2, 1888, was published an analysis of Carnrick's Soluble Food, copied from, and credited to, the Report of the New Jersey Dairy Commissioner. That Journal says editorially (Sept. 17, 1888, that Dr. Newton, the Commissioner, has forwarded to us a circular, recently issued, bearing upon the same subject, to which it is necessary we should, in common honesty, give equal publicity to that given the first question. The circular is as follows:

STATE OF NEW JERSEY, OFFICE OF THE DAIRY COMMISSIONER. PATERSON, N. J., Sept. 19, 1888.

In the report of this department to the legislature for the year 1887, an article by Prof. A. R. Leeds, entitled "Foods

for Infants and Invalids," was published.

Messrs. Reed & Carnrick have, in a communication to this office, taken exception to some of the statements therein made, claiming that the amount and character of the ingredients of their food preparations were misrepresented. In order that these gentlemen might receive full justice, I offered to have the analytical work revised by a chemist of reputation, who had never had any business or professional relations with either the State or Reed & Carnrick; and it was also stated that the results of this series of analyses would be published by this office. Accordingly, Prof. Elwyn Waller, Professor of Analytical Chemistry at the School of Mines, Columbia College, New York, was requested to purchase a package of "Carnrick's Soluble Food" in the open market, analyze the contents thereof, and report the results to me. Below is a copy of his report.

"I examined a sample of 'Carnrick's Soluble Food (purchased by myself from Eimer & Amend.) I find that 38.26 per cent. of the albuminoids which it contains are in the soluble form. "The sample also gave readily the biuret reaction for peptones. I failed to detect in the food, when moistened, any of the 'hard, unchanged particles of casein' which it has been asserted that it contains. "My results lead to the conclusion that the casein in the preparation has been partially rendered soluble by the action of the diges-

tive ferment as claimed by the manufacturers."

(Signed) ELWYN WALLER, PH.D.

I append herewith a letter on this subject that I have received from Prof. A. A. Breneman, S. B., formerly Professor of Chemistry at Cornell University, now analytical chemist, 97 Water St., New York. WM. K. NEWTON, Commissioner.

New York, September 18, 1888.

Dr. W. K. Newton, State Dairy Commissioner of New Jersey.

Dear Sir,—The report of your department for the year 1887, refers to certain preparations made by Reed & Carnrick, of New York, in a way which, from my knowledge of their work, seems to do them injustice.

The statements to which I especially refer are:

(1) That the milk solids in the preparation known as Carnrick's Soluble Food contains merely the dried casein of the original milk, neither changed nor modified by any process of digestion.

(2) That the analysis of this food given in the Report of the State Board of Health of New Jersey for the year 1885 correctly represents it, giving as it does only 10.25 per cent.

of total albuminoids.

(3) In the analysis of the preparation known as Liquid Peptonoids (New Jersey State Dairy Report, 1887), the proportions of alcohol and albuminoids there given are made the basis of comments which are extravagant in language,

and unnecessarily severe.

On February 20, 1888, I made, at the request of Reed & Carnrick, a test of the peptonized milk received in good condition from their factory. Of the albuminoids of the original milk 46.6 per cent. were found to be rendered soluble (that is, no longer precipitable by boiling or by acids). Through the process of digestion such soluble nitrogenous matters must, under the circumstances, consist of peptones, albumoses and caseoses, products of the modification of the original albuminoids of the milk by digestion.

Having made many analyses of this food during the past three years, I have never found the proportion of albuminoids to run below 16.5 per cent. as determined by combustion with soda lime. The average of fifteen analyses, made since January 1, 1887, shows 18.96 per cent. of albuminoids. These results also agreed well with the analyses of the same food made by Stutzer and other well-known chemists.

As to the liquid peptonoids, the proportion of albuminoids is limited only by the quantity which can be kept unchanged in solution. 16 per cent. of alcohol is necessary to prevent decomposition of the albuminoids, and no quantity greater than three per cent. of these can be held in solution in this liquid. Many attempts have been made to accomplish a better result, but in all cases the excess of albuminoids was deposited after a time, or (with reduced proportion of alcohol) decomposition of the albuminoids occurred.

Very respectfully,

A. A. Breneman, Analytical and Consulting Chemist.

Seven Wonderful Cures.

In the Grub Street Journal of June 24th, 1736, appeared some lines on "Seven Wonderful Cures," a much advertised quack medicine of those days, which are sufficiently amusing to warrant reproduction:—

One felt his sharp rheumatic pains no more, A second saw much better than before: Three cur'd of stone, a dire disease and sadder, Who still, 'tis thought, have each a stone in bladder.

The last a little woman but great glutton,
Who at one meal eat two raw legs of mutton:
Nor wonder, since within her stomach lay
A wolf, that gap'd for victuals night and day;
But when he smelt the pill, he straight for sheiter
Run slap into her belly helter shelter, — Medical Classics, Oct. '88.

Chart of a Horse, with Key, Showing Many of its Diseases.

We find the following "Hints about Horses, and the Chart of a Horse, showing at a glance many of the diseases to which it is subject" in Medical Classics, October, This "Chart" will prove of great practical use to most of our readers who need such helps to aid in diagnosing diseases of horses. There are many good physicians for the human body who recognize themselves unfamiliar with horse diseases; and yet communities sometimes cannot do better than to call in their family physicians to prescribe for their diseased horses. We suggest to all our interested readers to lay this number of the Medical Monthly carefully aside for reference as occasion may require; or, better, send 10 cents to Medical Classics, 38 Murray Street, New York, N. Y., and ask for the October Number, 1888. Indeed, each of our readers would do well to send 50 cents to the above address for an annual subscription.

Hints About Horses.

It costs more to keep a poor horse than it does to keep a good one.

Change the feed for your horses often enough to make them

Improper feeding is the cause of nine out of ten cases of sickness among horses.

Every time you worry your horses you shorten their lives

and days of usefulness.

Sweat and dust cause the horse's shoulders to gall. So do

poor, ill-fitting collars.

The temperature of water for horses is not so much of an object as the purity of it. While it is best to have the water cool, it is more important to have it free from all impurities.

Mares in foal should have exercise and moderate work, and under no circumstances should they be subjected to harsh treatment, nor should they ever be allowed to go where they would

be in danger of being frightened.

The horse which can plow an acre while another horse is plowing half an acre, or that which can carry a load of passengers ten miles while another is going five, independent of all considerations of amusements, taste, or what is called fancy, is absolutely worth twice as much to the owner as the other.

Affection cannot be pounded into animals. Kind treatment insures the affection of an animal, while rough treatment is

sure to cause its hatred.

It is alike dangerous to other horses and men to spare the life of a glandered horse. Glanders is a highly contagious, incurable disease, and as a rule fatal in the human subject.

When horses are suffering from the bites of flies or stings of other insects, sponge the parts that cannot be protected by nets, with water in which insect powder has been mixed—a

tablespoonful to two gallons of water.

Animals of vicious habits should never be used for breeding purposes, as vices are transmitted. By careful breeding in this respect, the dispositions of the animals can be partially controlled.

Of two colts similar in disposition and sense, one may develop into a steady and valuable family horse, while the other may be everything that is vicious, treacherous and unsafe—all because of the difference in the men handling them.

Plenty of whitewash should be used, not only for the brighter appearance, but also as an disinfectant. Hot whitewash on the inside of barns, stables, poultry houses and pig quarters,

will aid in preventing vermin and insects.

What the colt requires is a plenty of exercise, clean place to sleep, shelter from bitter storms, plenty of good grass of different varieties, good, clean hay without dust, and good, sound oats. Colts raised in this way will not look so well, nor win as many premiums, nor sell for as much money, but they will last.

CHART OF A HORSE, SHOWING AT A GLANCE MANY OF THE DISEASES TO WHICH IT IS SUBJECT.

1. Caries of the lower jaw.—2. Fistula of the parotid duct,—3. Bony tumor of the lower jaw.—4. Swelling from pressure of the bridle.—5. Poll-evil.—6. Inflamed parotid gland (commonly called mumps).—7. Inflamed jugular vein.—8. Fungus tumor, produced by pressure of the collar.—9. Fistulæ in the withers.—10. Saddle gall or sitfast.—11. Tumor of the elbow (shoe-boil).—12. Hardening of the knee.—13. Clap of the back sinews (swelled sinews).—14. Mallanders.—15. Speedy Cut.—15a. Splint.—16. Ringbone.—17. Tread on the coronet (caking).—18. Quittor.—19. Sandcrack.—20. Contracted foot (ring foot of a foundered horse).—21. Capped hock.—22. Sallenders.—23. Spavin.—24. Curb.—25. Swelled Sinews.—26.—Thick leg (caused by interfering).—27. Grease.—31. Rat's tail.—32. Injury from pressure of the girth.—33. Atrophy or wasting away of the muscles of the shoulder (Sweenie).—34. Shoulder joint lameness.



Book Hotices.

Hand Book of Pharmacy and Therapeutics (Lilly), 248 pages, Third edition, thoroughly revised. Eli Lilly & Co., Indianapolis, July, 1888.

The aim of this book is stated in the introduction to be "to furnish the busy practitioner a reliable means of ready reference, at once concise, systematic and authoritative, to which he may refer with confidence in cases of doubt. Younger members of the profession and medical students will find this little work full of suggestions." It will be sent free to any physician, druggist or medical student by addressing Eli Lilly & Co., Indianapolis, Ind., mentioning this journal.

The Physician's Pocket Day-Book. Designed by C. HENRI LEON-ARD, M. A., M. D. Size, 7½ inches long, 3½ inches wide and 3% of an inch thick. Bound in red morocco, for the pocket; pencil loop and flap, red edges. Price \$1.00 postpaid. The Illustrated Medical Journal Co., Publishers, Detroit, 1888.

This is the 10th year of issue of this exceedingly popular Day-Book, which contains several new features. Besides accommodating daily charges for thirteen months for fifty families, and the other usual memoranda pages, it has a very complete list of Doses of Old and New Drugs; Poisons and Their Antidotes, Tried Tests for Urinary Deposits, Chemical and Microscopical; Obstetric Calendar; Disinfectants for the Sick Room and Vaults; Tables of Weights and Measures; Table of Eruptive Fevers; and Drops in a drachm of fluid medicines.

Miss Parloa's New Cook Book. By MARIA PARLOA, Principal of the School of Cooking in Boston, etc. Boston: Estes & Lauriat, 4to. Pp. 58. Paper, Limited Edition. (From Publishers). Price 30 cents.

This beautifully lithographed paper cover edition is so cheap (thirty cents sent to the publishers) that no house-keeper need be without a copy. The value of this "New Cook Book" is conceded on all hands, and is soon to replace all similar works as the standard. The variety of dishes of every kind is unusually great, and the carefulness of detail in telling how to prepare each one brings cooking down to a simple art. It is a book that the doctor should have among his books for frequent reference, in order that

he may know what to tell his nurses as to how to prepare food for the sick. We wish every housewife would adopt this guide book or make her cook follow out its directions; and then we would have less cause to complain of want of variety of dishes and of well prepared articles of food from the kitchen. This book would be a good Christmas gift to lady friends. Try it this way with some deserving patients.

The Ear and Its Diseases, being Practical Contributions to the Study of Otology. By SAMUEL SEXTON, M. D., Aural Surgeon to the New York Eye and Ear Infirmary; Fellow of the American Otological Society; Fellow of the New York Academy of Medicine; Member of the Medical Society of the County of New York, and of the Practitioners' Society of New York. Edited by Christopher J. Colles, M. D. Octavo, 473 pages. Numerous illustrations. Extra muslin, \$4.00. New York; William Wood & Company,

This is not a systematic treatise, as one might suppose at first glance of the title; but its scope is better explained by stating that the work is divided into four Parts—that Part I contains "Remarks on the Anatomy and Physiology of the Auricle, External Auditory Canal and Contiguous Parts, and the Membrana Tympani;" Part II treats of "Causes of Ear Disease;" Part III is devoted to "Wounds, Injuries and Diseases of the Ear and their Treatment"; and Part IV gives some "Miscellaneous Articles" relating to school-rooms and school life as bearing on deafness; to effects of high and low pressure, as in tunnels, diving, in balloons, etc.; to unskillful treatment of ear troubles; to claims of soldiers, sailors, etc., for pensions on account of deafness, etc. This is a book for the post-graduate—not under-graduate—in medicine; and when taken as such, it is a useful book to general practitioners, and a very important book to specialists.

System of Gynecology by American Authors. Edited by MAT-THEW D. MANN, A. M., M. D., Professor of Obstetrics and Gynecology, Medical Department of University of Buffalo, N. Y. Vol. II. Illustrated with Four Colored Plates and 361 Engravings on Wood. Philadelphia: Lea Brothers & Co. 1888. 8vo. Pp. 1180. Sheep. (From Publishers.)

Such a work as this is to be considered in its relation to those that are to be standard works of reference. We do not know what will be the "catch-up" character of the volumes to come after this one; but if we are to judge of those by this volume, our opinion would be that for the most part the authors have not caught hold of the popular want—

they have written too much from a personal standpoint of observation. Their effort seems too much to be to defend their peculiar views rather than to present all phases of their subjects and all important facts or suggestions of others than themselves. Of course there are enough thoroughly systematic papers or chapters in the volume to entitle it to its title. Such, for instance, are the papers of Dr. T. Gaillard Thomas, on "Extra uterine Gestation;" of Dr. William Goodell, on the "Treatment of Ovarian and of Extra Ovarian Tumors;" of Robert Battey, on "Battey's Operation;" of George T. Harrison, on "Displacements of the Uterus," etc. It is proper to add that all of the papers are good—simply some of them are not full enough, although long enough.

Clinical Atlas of Venereal and Skin Diseases, including Diagnosis, Prognosis and Treatment. By ROBERT W. TAYLOR, A. M., M. D., Surgeon to Charity Hospital, New York, and to Department of Venereal and Skin Diseases New York Hospital, etc. Illustrated with 192 Figures, many of them Life Size, on 58 Beautifully Colored Plates. Also many Large and Carefully Executed Engravings through the Text. Parts I and II. Venereal Diseases. To be Completed in Eight Folio Parts, Measuring 14x18 inches. About 400 pages of Text. Price per Part, \$2.50. Two Parts to be Issued Every Two Months. For sale by Subscription Only. Philadelphia: Lea Brothers & Co. 1888.

We give the above extended title because it gives a good general idea of what this Atlas is to be. Part I opens with the description of gonorrhea, while the eleven figures constituting Plate I picture, as well as it is possible to do on paper or chromo-lithographic board, the appearance of the discharging penis and inflamed vulva of gonorrhea, and some of the usual complications in both sexes. Chancroids and syphilis are considered in the text and illustrated in the Plates of Part II. A few of the syphilides are illustrated. Where the clinical experience of the author has been wanting in illustrations, he has supplied the lack by using the drawings and paintings and photographs in the hands of established dermatologists and syphilographers. Thus, practically speaking, every known phase of venereal and skin diseases are amply described and figured for easy recognition in this Atlas. An excellent feature has been the brief clinical record of each case illustrated. The latest advances in pathology, diagnosis and treatment are set forth with striking accuracy and impressiveness. The work is remarkably cheap when its scope and excellence of style of publication are considered.

Editorial.

Much Matter is Left Out of this Issue

To make room for the reports of the Medical Society of Virginia.

The Session of the Medical Society of Virginia

In Norfolk last month was full of profitable interest. The merits of the papers and discussions placed them at least, upon a level with those presented to like bodies, while some of them are worthy of being classed as unusually valuable. The paper by Dr. William C. Dabney, on "Atypical Forms of Typhoid Fever" was distinguished by careful study of his subject, judicious selection of relative clinical facts, and the enunciation of sound common sense doctrines. Dr. Hunter McGuire presented an important contribution with regard to supra-pubic incision of the bladder for prostatic and other obstructive bladder diseases; and the results of his observations seem to justify the belief that a real advance has been instituted by him in the field of surgery of the urinary organs. Dr. Lewis G. Pedigo presented the results of some original experiments and observations with reference to the value of amyl nitrite in cases of poisoning by prussic acid, which lead him also to suggest its use as the physiological antagonist of such heart depressants as gelseminum, veratrum viride, etc. Dr. Milton Josiah Roberts, of New York City, made his visit very instructive to the Society by demonstrating some of the practical applications of his woven wire corset, as a substitute for the plaster-of-Paris jackets in cases of spondylitis, lateral curvatures of the spine, etc. Dr. Joseph A. White exhibited further illustrations of inventive genius by presenting a palate retractor, a tongue depressor, etc., -instruments which, now that they are introduced, specialists cannot well afford to be without. The off-hand address of Dr. John B. Hamilton, Surgeon-General U. S. Marine Hospital Service, giving a history of the origin and spread of the present epidemic of yellow fever in Florida, etc., was replete with information, which was well worth the while of the Society to learn. We might go further and individualize other good papers, but want of space forbids even their enumera-

There was an event during the proceedings that gave us both surprise and pleasure. It was fresh in memory that, during the last session of the Virginia General Assembly, the Medical College of Virginia made itself conspicuous, both through a petition of its students and efforts of some of its Faculty, in trying to prevent certain legislation almost unanimously asked for by the Medical Society of Virginia. At least four of the eight Professors appeared before the Committees of the Senate or House of Delegates, and by their speeches, lobbying and personal associations firmly fixed the conviction on the minds of legislators, as on members of the Society who were working hard for the success of an amendment which the Society had approved, that they were using every influence they possessed to defeat the amendment to the Medical Examiners' Law. In short, the College created for itself a very unenviable notoriety, which has naturally resulted in a reduced number of students this winter.

When, in the order of business of the recent session of the Society, the nomination of members of the Medical Examining Board of Virginia came up, Dr. J. E. Chancellor, as a mark of the Society's appreciation of the hardships and difficulties encountered, and of the faithful services rendered by the existing Board, offered a resolution which practically nominated for commission by the Governor for the new term of four years, each of the thirty-two members of the regular profession now on the Board. The speech and the resolution were received with applause. Just then, much to the surprise and gratification of those present, Dr. J. S. D. Cullen claimed the floor in order that he might second the resolution. He stated, in substance, that the position of the Medical College of Virginia was misunderstood, and that it had suffered under misrepresentations. He said that the Faculty of his College has reasserted its approval of the Medical Examiner's Law, and he felt that he was acting by authority of his Faculty in now seconding the resolution just presented. Such a speech as he delivered, and emanating as it did from such an authoritative source, was as much a surprise to most of the Society as streams of sunrays breaking through a long sullen threatening cloud; and it was as much of a gratification, too, as shown by the outburst of applause that came from all parts of the Hall. As to an evidence of the feeling of the Society with regard its confidence in the ability and fidelity of the old Board, the resolution was unanimously adopted.

Of course the University of Virginia, which has never allowed itself to be misunderstood on so vital a question, involving the elevation and maintenance of the standard of attainments of the profession of this State—rank and file—

seconded the resolution through one of its Professors, Dr.

Wm. C. Dabney.

Thus ends, we trust, a chapter of unfortunate "misunderstandings" in the history of the profession of Virginia which we hope never to see repeated. As for ourselves, as to the generally understood or misunderstood position which the Medical College of Virginia has held with regard to this matter, we shall hope that this instance will prove an illustration of whatever truth there may be in the line, "All's well that ends well."

The social features of the session were simply unsurpassable for such an occasion. They consisted in having open doors everywhere for the doctors. Invitations to luncheons, dinings, suppers, etc., were too numerous to keep up with. Visits to the U.S. Navy Yard at Portsmouth, to the Naval School-Ship, "Franklin," to the Monitor, to St. Vincent's Hospital, to the U.S. Marine Hospital, etc., and the evening trip to Virginia Beech, where, after an "oyster bake," as a courtesy from the managers of the excellent hotel at this ocean side resort, a specially arranged drill of the Life Saving Service Corps at this port was witnessed—all these things and more, added to the grand banquet on Friday night, and the unceasing courteous attentions of the Local Committee of Arrangements exalted, if possible, the estimation of the unbounded hospitalities for which the professions and citizens of Norfolk and Portsmouth are renowned.

But speaking for the good of the Society—for the economy of time of so many of those Fellows who sacrifice a great deal at their homes in order to attend the sessions—we must express the hope that hereafter such tempting hospitalities will not be offered as to draw the doctors away from the Society Halls. The afternoons were lost from Society work, and many a doctor, pressed by want of time to get away from home at all, and by letters and telegrams to return, cannot afford such loss even in exchange for so much pleasure.

The Journal of Ophthalmology, Otology and Laryngology

Is the title of a new quarterly which will be issued by Messrs. A. L. Chatterton & Co, New York. The first number will appear in January, 1889. It will be edited by Drs. Geo. S. Norton and Chas. Deady. Subscription \$3.00 per year. The *Journal* will be devoted to original articles upon the three specialties and made of the highest practical value to all interested in the eye, ear or throat. In addition the immense mass of material found at the N. Y. Ophthalmological Hospital will be utilized.

International Journal of Surgery and Antiseptics.

The October number of *The International Journal of Surgery and Antiseptics* contains an excellent likeness of the late Dr. C. R. Agnew, of New York. The subscription of the *Journal* is \$1.00 a year. Single copy 30 cts. Dr. F. King, Manager; P. O. Box 587 New York, N. Y.

Dr. Joseph O'Dwyer,

The originator of the operation and of the instruments essential for intubation of the larynx, has been appointed Professor of Diseases of Children in the New York Post-Graduate Medical School and Hospital.

Bear Lithia Water.

We call the attention of practitioners to the advertisement of the Bear Lithia Water Co. on advertising page 2. This water is used in this city by many of our leading physicians who speak well of it. The low rate at which it is sold adds to its popularity.

The Case of Emperor Frederick III.

The reports of the German physicians, translated by Dr. Henry Schweig, of New York, and Sir Morell Mackenzie, on this celebrated case is issued in book form, cloth and paper, by Edgar S. Werner, Publisher, University Place, New York. Just now these unabridged reports will prove interesting to the profession.

Washington Obstetrical and Gynæcological Society.

At the annual meeting of this Society, held October 19th, 1888, the following officers were elected for the ensuing term: President, Dr. Joseph Taber Johnson; Vice-Presidents, Drs. D. Webster Prentiss and W. W. Johnson; Secretaries, Drs. S. S. Adams and G. W. Cook; Treasurer, Dr. George Byrd Harrison. This Society is doing excellent professional work in its special field, and under its present "teem," it is expected that the profession will be much more benefitted by reports of its proceedings.

The Archives of Gynæcology

Records 728 articles on the special subject of its title printed during the year 1888. It is the aim of the editors to publish all current thought in these departments of medical knowledge. The publishers, Messrs. Leonard & Co., 141

Broadway, New York City, do not send sample copies, but if you are not pleased with the first number it may be returned and the order erased. Subscription \$3.00 per annum. Payment is not asked till the end of the year. We most cordially recommend this journal to our subscribers, as containing much useful information that can not be got from any other one journal published in this country.

Seven Springs Iron and Alum Mass.

Some excellent products of the chemist or from the wells and springs at times, seem to lessen in popular use by the profession solely because of the eager search for something new. But the search for something better than the Seven Springs Iron and Alum Mass or Waters as an alterative tonic having failed of success, we wish to recall attention to it. For a tonic in functional diseases of females, for numerous forms of dyspepsia, etc., it is the remedy. It is comparatively cheap, can be put into capsules or dissolved and taken in solution.

An Old Practice.

One which has proven a bug-bear to many of our readers, is the practice of having to transcribe their calls to a journal, then again to a ledger, before an account can be rendered to their patient. Henry Bernd & Co., of St. Louis, have, however, recently perfected a system whereby the calls once entered are posted, and the patient can be told the amount of his indebtedness at a glance without referring to auxiliary books. Those physicians now using them speak in the very highest terms of praise of Bernd's Registers, which are rapidly becoming the standard account books for the physicians of America. See their page advertisment.

The Liebig Company

Is entitled to the special thanks of the Virginia profession for its many courtesies. Last year, during the session of the Medical Society of Virginia in Richmond, this Company contributed the ample supply of Imperial Crown Sherry, which was used on the banqueting occasion; and again this year at the Norfolk session they contributed to the flow of soul on the night of the banquet by presenting the Imperial Crown Sherry, which was so much praised because of its excellence of purity, taste and relish. This is the Company (represented in this country by Dr. Ferdinand Seeger, 38 Murray Street, New York) that presents the best

qualities of Coca-Beef preparations, and which rank highest in the list of tonics for neurasthenics and broken-down constitutions generally. We have used the various Coca-Beef tonics advertised by this Company in this journal according to the suitability of the cases requiring such treatment, and we must acknowledge with special pleasure that the preparations have acted well, and the result confirms the belief that this firm does not seek cheap articles, but supplies only "honest goods at honest prices."

Messrs, Mariani & Co.

Have removed their offices and warerooms from their former places to No. 52 west Fifteenth street, New York, N. Y., where they will be most happy to receive members of the medical profession visiting that city, and where all correspondence will have their prompt attention. Read their advertisement facing first reading page. This firm was about the first to popularize the tonic virtues of the erythroxylon coca, and to this day there are many practitioners who have tried all of the wines of coca of current manufacture who will depend on no other preparation than Vin Mariani.

Obituary Becord.

Dr. Harvey Black,

Superintendent of the Southwestern Lunatic Asylum, at Marion, Va., died in Richmond, Va., October 19th, 1888. It was his case upon which Dr. Hunter McGuire based his remarks during the recent session of the Medical Society of Virginia, and to whose remarks (reported in this issue of the Medical Monthly) we refer our readers for the medical

history of his fatal illness.

He was born in Montgomery county, Va., August 27th, 1827. During the Mexican war, he served as Hospital Steward to a Virginia Regiment of Volunteers. On his return to Virginia in 1848, he entered as a student in the Medical Department of the University of Virginia, from which institution he received his medical diploma in 1849. He at once located in Blacksburg, Va., and there established himself in a large and influential practice. During the war between the States, he served as a Confederate Surgeon, rising from a Regimental Surgeon, through the rank

of Surgeon of Stonewall Brigade, to that of being Surgeonin-charge of the field hospitals of the Second Confederate Army Corps. After the surrender at Appomattox, he returned to private practice at his former home, where he won a wide professional reputation. In 1872, he was elected President of the Medical Society of Virginia, and, a year later, an Honorary Fellow of that Society. In 1876, when the affairs of the Eastern [Va.] Lunatic Asylum seemed to be needing the attention of a proper organizing person who, at the same time, combined medical qualities of the highest order, the Board of Directors elected Dr. Black to the Superintendency, and after much persuasion finally succeeded in getting him to take the position. At once, the touch of the master hand brought order out of confusion, and this Asylum again took rank among the very best in the country. About 1880, he returned to his home in Montgomery county, and resumed his extensive private practice. About 1882, he was elected to represent his county in the Virginia House of Delegates. He served his people and the State for several years as a legislator, and each of his acts as such stands conspicuously forward to-day as being wise, prudent, honorable and to the best interests of his State. Especially did he work hard for the promotion of the medical interests of this Commonwealth while in the Legislature. When the Southwestern Lunatic Asylum was built at Marion, Va., in 1885, he was unanimously elected to take charge as Medical Superintendent, in which position he was serving at the time of his death. He died the death of a Christian hero -leaving a record that any should be proud to have. He was a pure, good and valuable citizen, and a doctor of excellent ability. As tender in sympathies as a woman, he was yet the model by which men would have been proud to shape their evidences of courage or bravery. In all the admirable traits of man, Dr. Black presented about as well rounded a character as any person we ever knew. His death at this time appears to us to be an irreparable loss to the profession, as it is to his family and the circle of friends he had brought around him from all parts of the country. His remains were removed to Blacksburg for interment. He married Miss Kent, of Blacksburg, Va., in 1852, who Among his children is Dr. Kent Black, of survives him. Blacksburg.

Dr. James D. Galt.

A called meeting of the Norfolk Medical Society was held

Tuesday afternoon, September 11th, upon the announcement of the death of Dr. James D. Galt, its presiding officer.

The First Vice-President, Dr. E. E. Feild, briefly stated the object for which the Society was summoned, and upon motion of Dr. W. A. Thom, a committee, consisting of Drs. H. M. Nash, Alex. Tunstall and W. H. Shepherd, were appointed by the chair to draft resolutions suitable to the occasion.

The committee reported the following memorandum, which was unanimously adopted and ordered to be spread

upon the minutes:

"The death of the presiding officer of this Society, Dr. James D. Galt, this morning by apoplexy, renders it meet that we should assemble in mournful session, in contemplation of this unexpected bereavement, to express our unfeigned sorrow for the removal from earth of a medical associate well versed in the learning, deeply interested in everything affecting the welfare of his profession, a cultivated, genial and amiable gentleman, and a most reliable friend.

"Dr. Galt was reared in this city, and belonged to a family distinguished for culture and talents. He received a most liberal education in the best schools of this city, and at the University of Virginia, where after an extended academic course, he took his degree in medicine in 1853. He subsequently attended lectures and graduated at the University of Pennsylvania, and was afterwards for a considerable period a resident physician at one of the most prominent general hospitals. In 1856 he entered upon the practice of medicine, which he assiduously followed until 1861.

"During the war between the States he served as a surgeon in the infantry of the Confederate States Army. In 1865 he resumed his calling in Norfolk, and was for years Physician to the Almshouse, and also quarantine medical officer of this district. With this brief reference to the qualities of

our lamented friend, be it

"Resolved, That in the death of Dr. Galt our Society loses one of its oldest, most punctual and energetic members, for whom we sincerely and deeply mourn;

"That we respectfully tender our sympathies and con-

dolence to his afflicted relatives;

"That we will wear our accustomed badge of mourning, and attend his funeral in a body; and

"That a copy of these resolutions be transmitted to his family."

VIRGINIA MEDICAL MONTHLY.

VOLUME XV—No. 9.

WHOLE NUMBER, 177.

RICHMOND, DECEMBER, 1888.

Original Communications.

ART. I.—Diseases of the Nose and Pharynx, and Their Surgical Treatment. By W. CHEATHAM, M. D., Lecturer on Diseases of the Eye, Ear, Throat and Nose in the University of Louisville; Eye Ear, Nose and Throat Physician to the Masonic Widows' and Orphans' Home and Infirmary of Kentucky, etc., Louisville, Ky.

It is to the more common forms of the diseases of the nose and pharynx requiring surgical interference, to which I wish to refer. For permanent relief to most of the more common forms of nasal catarrh, surgery is indicated.

Take, for instance, first, probably the most common of nasal troubles, the so-called *chronic nasal catarrh*. Let me cite a case, examples of which I see ten or a dozen daily. They come with this history: "Doctor, I catch cold easily; how, I do not know. My head stops up; I get my breath with difficulty; my head aches; my ears feel full or stopped up. Even between my colds, one or the other side of my nose is obstructed; which ever side I lie on closes." Some of the patients complain of loss of voice with each cold, which is the result of laryngitis, which can never be cured until the nasal affection is relieved. Some of them have to use their handkerchiefs a great deal. Many of them com-

plain of the mucus dropping back in their throats. This must be a familiar picture to most practitioners.

Now as to the pathology of this condition. The submucous tissue of the nose is made up of a mass of blood vessels, the walls of which either by some dyscrasia or by frequently-recurring colds, become very much relaxed. These vessels are said to empty and fill as those of the penis. Some have said that excessive venery will produce this form of catarrh. On the least exposure to draughts of air, the blood is driven to the internal organs; the vessels of the nasal sub-mucous tissue fill; the nose, as a consequence, is obstructed. Of course the condition of the skin, and of the general health, have much to do with this, but this is not surgery; so I merely mention it. Again, when the patient is lying on one side or the other, gravity fills the vessels of the lower side.

Seeing this in the acute stage, local applications, in the form of sprays, etc., we can well understand, with general treatment, will be of much service; but it is usually many months before the patient realizes there is local trouble, and many, many more before he will acknowledge to his doctor that he has nasal catarrh; and many, many more before the rhinologists have an opportunity of seeing him. So it will be observed that the chances of seeing the patient in his first attacks are but few.

Admitting what has been said as true, what effect can astringents, stimulants, or in fact any local medications, have? The true cause is deep-seated in the sub-mucous tissue, and the disease is what I call nasal engargement, or engorgement of the nasal sub-mucous tissue, to distinguish it from true nasal-tissue hypertrophy.

With a weak solution of muriate of cocaine, the two affections can be differentiated. Cocaine will shrink the engorged tissue, but will not affect the hypertrophied. In the management of this engorged tissue I use to depend upon, and extol highly chromic acid, or some of the combinations of acetic acid. To get any service from either, a large slough must result, which leaves a correspondingly large cicatrix, on which the secretions will collect, dry and decompose, for-

ever afterwards causing much discomfort. Chromic acid has the effect of shrinking the blood vessels, but it is not permanent. We must tie them down or destroy some of them; and the indication is to do so with as little superficial cicatricial tissue as possible. It can be done by electrolysis. This is difficult, though, because it is very painful. You may ask, why not prevent the pain by cocaine? Because cocaine shrinks the tissue so as to render it very difficult to get the needle under it. I have tried the electrolysis, but had to give it up. A small electro-cautery has the same objection. I had made, as I show you here, a long slender knife for the thermo-cautery. This is very painful, the reaction following very great, the cicatrix large, and it has to be introduced heated. This heat cannot be confined, either: all the metal is heated, and the radiated heat does much harm. It ties down the vessels, but does more damage than necessarv.

The galvano-cautery, which I shall consider now, is, I believe, taking everything into consideration, the best. I had so much trouble with chemical galvano-cauteries that I had to give them up long ago. I have invested hundreds of dollars in them, and just when I wanted them for use was when they were not in order. After some years of discouragement, I believe we have at last, in the incandescent current, found something that will do the work. I have had led from the "Louisville Electric Light Co.," a wire giving me such a current. By this rheostat made by the "Gaynor Electric Supply Company," of this city, I have complete control of the current. You will observe that I can bring this platinum knife to any degree of heat I may wish. This can be introduced in the nose cold, heated then as wished, the application made (by cocainizing the tissue), without pain, and the knife withdrawn nearly cold.

Take a case of engorgement of the tissue covering the inferior turbinated bone; it is this bone that is most frequently involved. I spray the nose with an eight per cent. solution of cocaine, and in a few moments insert a piece of cotton, saturated with the same solution, which will reach the full length of the bone, leaving it in ten or fifteen minutes. I

then insert my cautery-knife back to the posterior end of the bone, turn on my current slowly, press firmly on the knife, and, bringing it slowly forward, make a deep horizontal incision the full length of the bone. If the tissue is very much engorged, I may make two parallel incisions, then insert the same cotton with the cocaine on it, and leave it in several hours. No pain results, and but little reaction follows. There is usually no hemorrhage. I get as a result one or two deep linear cicatrices, which tie the relaxed vessels down, and as a result no more nasal stenosis, no more dropping of mucus into the throat, free respiration, recovery of hearing, no more laryngeal catarrh; or if these little symptoms do not disappear, a short treatment directed especially to them, relieve them, with but few chances of a relapse if the skin and general condition be properly attended to.

Hypertrophies of the nasal mucous membrane and nasal polyp can be relieved by electrolysis, or the galvano-cautery; but I think the best method is the cold wire snare, of which there are numbers. I have tried the Jarvis, the Douglas, the Sajous, and almost all that are in use, but I prefer Mackenzie's, with a slight modification I have made. Tafel Brothers, of this city, made them. I hope soon to make a further modification which will still increase its utility. The main beauty of this snare is that it can be manipulated with one hand. I have yet to see a polyp, or a hypertrophy of the mucous membrane of the nose, or of the turbinated bones themselves, that I could not remove with this snare. Only a few days ago, I removed quite a large hypertrophy from the anterior end of the middle turbinated bone.

For the removal of bony ridges springing from the septum, when I think it is necessary to remove them, (I modify it in this manner, as I believe they are often removed when it is not necessary), we have chisels, gouges, plows, etc. I have a dental engine, with burrs made with extra long shanks, with which I propose to tunnel these ridges and crush them in, thus again getting a great desideratum, a small cicatrix.

Deviated septa are, I think, frequently given the credit of causing much trouble, without facts to support such. There are but few people in the world who have straight nasal septa—some the result of trauma, but many the result of nasal engorgement, polyp and hypertrophies. Remove the cause, and many of them will straighten without other treatment. Of course some of such cases, (one of which I had some months ago, in which I fractured the septum, and splinted by plugs, getting an excellent result), I say, some few of them need surgical measures to correct them. In the case of the septum that I fractured, I also took from one side quite a large slice of cartilage.

As a cause in some cases, and in some as a result of nasal engorgement, we have hypertrophy of the pharyngeal tonsil, or the vault of the pharynx filled with adenoid tissue.

According to Lacauchie, as confirmed by Kölliker and Luschka, the adenoid tissue at the vault of the pharynx is a conglobate glandular mass, having the same structure as the tonsils; and hence it has been termed the pharyngeal tonsil. It is soft and spongy, and so closely incorporated with the cartilaginous tissue uniting the pharynx to the base of the cranium that it is exceedingly difficult to separate them. The follicles are identical with the solitary follicles of the intestine, and when in great numbers give a glandular

aspect to the vault of the pharynx.

Hypertrophy of this gland is more common in childhood than in adult life, and is probably oftener present in males than in females. Cases I have seen this summer were in persons under twenty years of age, the majority being under ten years; the youngest is four years old. The symptoms are those of a severe cold in the head, with very much less secretion from the nose than commonly marks a simple cold. The secretion drops down from behind the soft palate, is sometimes very excessive, occasionally very tough and difficult to remove, and sometimes the efforts to get rid of it produce nausea and vomiting. As stated before, one or the other or both nostrils are closed posteriorly, so the breathing, especially during sleep, is distressing. The child usually sleeps with the head thrown back, lying flat on the back, and often with the arms over the head. The mouth is wide open; the tongue, becoming very dry, drops back into the throat, producing a distressing strangulation; whereupon

the child cries out and jumps up badly frightened. A short period of rest ensues, to be followed by another paroxysm. In this way the little one passes the night, and on waking in the morning is as tired as when it went to bed. As a consequence, such children are usually anæmic, have little appetite, are stunted in growth, have narrow-pointed chests, and often the arch to the hard palate is much narrowed. The child coughs, catches cold easily, is deaf, and shows a deficiency in the articulation of such nasal sounds as m and n, or has what Dr. Meyer, of Copenhagen, calls "dead pronunciation."

Such patients have no use of their noses; have never realized the importance of the organ; can neither breathe through them, nor blow them. They never have a good night's rest.

The diagnosis is usually easy. With the rhinoscope no mistake can be made; or in small children the finger can be used. If the vault is filled with a number of enlarged glands it presents to the finger, as Cohen says, the sensation of a bunch of earthworms. If seen, it looks much like a bunch of cauliflower. Again, it will look as in the patient whose history I reported some time ago.

A young man, aged nineteen years, told me he had never known any use for his nose. He had never been able to breathe through it, nor blow it. He had Meyer's "dead pronunciation" to perfection. He said he had never had a good night's rest; was just as tired on getting up in the morning as when he retired at night. He slept with his mouth wide open, and breathed through it both night and day—had horrible dreams and nightmares. His mother said that at night his breathing could be heard in every part of the house, and sometimes, after a severe paroxysm or an extra effort to get more air, he stopped breathing so long that she had frequently hurried to his bed, fearing that he was dead.

I found his nose quite free, but posteriorly the nasopharynx was filled with a red, glistening mass, convex forward, and perforated with many openings like the faucial tonsils. There was absolutely no space on either side or in front; it was adherent to the pharyngeal wall. I endeavored to snare it, or get hold of it with Mackenzie's laryngeal forceps, but failed. I introduced my finger behind the soft palate, hugging the wall of the pharynx closely, and found that I could tear it loose from the pharynx easily; it yielding like liver tissue. After getting my finger well up in the vault of the pharynx I discovered two horns extending into either post-nasal space. These I also tore out with my finger. Relief was almost instantaneous. He was now able to blow his nose and breathe through it, which to him seemed very strange. A weak carbolic wash was given. Some slight reaction followed, and for a few days some small pieces of tissue were discharged. Several days later he returned home, having been entirely relieved. Several months have now passed since the operation and there is no

return of disagreeable symptoms.

It is indeed a triumph for rhinology when a disease that had caused nineteen years of distress should be relieved in a few minutes by an operation so simple. Of course in vounger patients relief is not so prompt or easy, many days of patient treatment being often required. Children do not bear cocaine well, and because of hæmorrhage, which always attends the operation, general anæsthesia can not be resorted to. All we can do in these cases is to remove the tissue by piecemeal by an operation once every two or three days. I sometimes scrape the pieces out with my finger, or the curette, or pull them away with the forceps. In some cases I use chromic acid. I have seen no benefit from washes or powders. Not infrequently this trouble exists with engorgement of nasal tissue, and sometimes with true hypertrophy. Some physicians claim that by removal of the hypertrophied and engorged nasal tissue the adenoma in the vault of the pharvnx will disappear. This has not been my experience. If the physician will but note the number of children presenting the symptoms described at the beginning of this year, he will be convinced that the affection is by no means uncommon; if he could see these children after they have been put to bed, and witness the distress occasioned by this form of nasal obstruction, he

would wonder that it should have received so little attention at the hands of medical writers. Since the affection is quite common in children (few of whom receive treatment), and not common in adult life, it is clear that many of the cases are cured by puberty. Great and irreparable damage, however, may and often does result before puberty is reached, and in view of this fact the importance of early and efficient treatment is manifest.

ART. II.—Food Versus Bacilli in Consumption (Opus 286.)
An Open Letter from EPHRAIM CUTTER, M. D., LL. D., Hon. F. S. SC. (Lond.), Corresponding Member Societe Belge De Microscopie, Principal of Medical Department of Instruction in the American Institute of Micrology, etc., of New York city., to his Son, John Ashburton Cutter, M. D., B. SC., with answer.

"I have long ago ceased to regard all the bacilli, micrococci, and bacteria, etc., as ultimate forms of animal or vegetable life. I look upon them as simply the embryos of mature forms, which are capable of propagating themselves in this embryonal state. I have observed these forms in many diseased conditions; many of them in one disease are nothing but the vinegar yeast developing, away from the air, in the blood, where the full development of the plant is not apt to be found." * * * "The very name specific should be blotted from medical science, and left entirely to the quack, who knows nothing else. There is really no such thing in medicine. All we can do in any disease is to aid nature, and to follow her as closely as possible in her curative processes; and this we can only do wisely and well by understanding fully the true cause and pathology of every disease we treat,"—(Salisbury—McNaughton Prize Essay on Malaria.

You ask me to give you clearly how far bacteriology comes short, compared with the actual state of practical clinical knowledge as realized by Dr. Salisbury, myself and others? I will do so as well as I can in the paternal relation, one which is not ordinarily used to inculcate false-hoods, untruths or things of no value.

I start out with the general proposition that your business as a physician is, to cure and prevent disease. When patients come to you, you are to cure when you can; when

you cannot, you are to relieve and prevent disease if you can. Your duty is to use legitimately all the means within your reach to produce these ends. Let us look at our subject in this light.

Taking consumption to mean consumption of the lungs or bowels, sometimes called tuberculosis of those parts, let us see what bacteriology has done, and then look at the food

side of the question.

I. Bacteriology is a science in medicine, introduced by Dr. Koch, since 1880. It shows:—(1) The cause of consumption to be bacilli, which may be cultivated by inoculation in animals and produce consumption in them. This has been doubted, but I am willing to concede it.

(2.) Dr. Koch has been endorsed, titled and set up by the German Government in a laboratory, and has published his

researches in a most magnificent manner.

(3.) Chairs of bacteriology and laboratories have been set up in medical colleges in many places and countries. All these go to show that bacteriology is the most popular and well received thing in the etiology of consumption, and of course superior to every other.

Indeed, the First International Tuberculosis Congress of nearly five-hundred medical men has lately been convened at Paris, which taught, if the report I saw was correct,—(a.) Boil your milk and have your meat well cooked. (b.) Consumption is contagious from man to animals, with a decree to make cattle liable to seizure by meat inspectors. (c.) It comes in milk also, by inhalation, and the inoculation of saliva of patients. (d.) Preventive inoculation is useless.

(e.) What we need is some agent that will kill the bacillus.

(f.) We do not say the disease is incurable. (g.) The malady is in the blood. This is the height and depth of bacteriology. It shows the cause, gives no directions for treatment, but shows no cures while admitting their possibility.

II. Let us now look and see what has been done for twenty-five years on the food side of consumption, premising that the injunction to cook the meat and milk thoroughly, the admitting the curability of phthisis and its being a blood

disease, make my task easier, for it concedes what I want you to know and practice, and what has been known and practiced here for more than twenty-five years.

You know my motto for 1879, beautifully engrossed and intended as an heirloom. It reads, "In my opinion, should the experience of Dr. J. H. Salisbury and myself for the past 21 years be realized by all regular physicians in these United States, at least 13,000 lives would be annually saved by the detection and treatment of the pretubercular state alone." Let this make *item number one*. This motto is backed by an unpublished volume entitled, "A New Physical Sign of the Pretubercular Stage of Consumption. By E. Cutter, M. D. *Esse quam videre*. Illustrated by sixty-nine original microphotographs taken with objectives ranging from the 1-4th to the 1-75th inch, 1877, pp. 211."

Item 2. In 1858, one-hundred swine were fed by Dr. Salisbury on sour swill for three months; one-quarter of them died, and 104 were autopsied and found to be consumptive. (See A No. 1 Bibliog.)

Item 3. By the side of these, about one thousand other swine were kept on sound sweet corn for the same time; none died. Had consumption been contagious they should have caught it.

Item 4. Consumption has been cured, is being cured, and will be cured by proper feeding on the plans laid down in "The Relation of Alimentation and Disease," by J. H. Salisbury, M. D., LL. D. New York: (J. H. Vail & Co. 1888). You remember your brother Ben's case, how, in 1876, he was in the pretubercular state, how I kept him from going to Germany for his musical education for one year till he was cured, how he went, afterwards got sick again, and was said by his German physician to be in consumption, how I wrote him to live as he did before, how your mother being sick almost to death (see Diet in Cancer, Case IX Albany Medical Annals, July and August, 1887) and worrying about him, I had him come home to have his blood examined, to see how it really was, how that he got well and remains so now. You know Mr. Luther Whiting Mason, sick in the same way in 1877, how he was cured, went to Japan and

introduced Western Music in the public schools, backed by the Cabinet of the Imperial Government. This great result is due to his cure. Besides these cases, you know of more in my practice of a worse character. Add to these the hundreds that Dr. Salisbury has cured. There is evidence enough to show that this terrible disease is being cured, was being cured twenty-five years ago, and will be cured in time to come (see No. 13 B in Bibliography, appended) whether acknowledged or not. I hope you will not take the position of Dr. —, who, after I had tried to have an understanding on this subject, said, "I don't care if you do cure a case of consumption, I will not believe it." The Tuberculosis Congress does not say this. Nor will you, I hope. follow the example of an official of a medical society I once belonged to. I said to him, "If you will be kind enough to take a dispensary case, bring him in before the society, examine him before the members and pronounce him to be a case of consumption, I will try to cure him," He did so. and the official said it was a cure after I had got through with him, but that the case was not consumption.

Item 5. The plans in question tell how to diagnosticate a case of consumption by the blood morphologies when the ordinary physical signs of auscultation and percussion do not. It settles the question at once. This will be of great value to you, I know from my own experience. Bacteriology does not do this. This new physical sign of the pretubercular state is invaluable in army, navy and other health examinations, specially in life insurance examinations. (See Nos. 1—A; 1, 21—B Bibliography.)

Item 6. The plans in question show how to run a case intelligently, to know when a case is cured, to know exactly what food can be allowed by its action on the blood, to show lapses in diet, to keep patients from deceiving, and convincing them that there is no use in trying to deceive as to food. Bacteriology does not do this.

Item 7. The plans in question intimate that nature is the great healer: (1st.) By giving healthy normal food, and (2d). By removing food causes. This was found out by feeding singly on all common articles of food, seeing what

diseases they cause in this way, and showing that almost without exception, beef properly prepared can be a healthful food indefinitely. (See A-1 Bibl.) (3d.) Medicines do not cure. They oil the machine and are useful as lubricants, so to speak. You may have a locomotive in order and fired up, but it must be oiled ere it can work. Bacteriology holds out a hope of a cure by killing the bacilli by some agent, but does not state what agent. I would rather you would cure than have a hope to cure to practice medicine with. By the way, I mean curable, like typhoid fever, for example. The plans never claim to cure all the cases. If patients follow directions strictly, and do not work, nor worry, nor play too hard, you may reasonably expect to cure two-thirds, provided they take time enough; say from two to three years. Three-fourths of the swine that had consumption did not die of it, but nature eliminated the disease. Perhaps they might have died in time, but they were slaughtered for food. Thorough cooking kills the possibility of communicating the disease. This was known years before the Congress of Tuberculosis promulgated it. I am glad that it was promulgated. It makes thing much easier for me.

Item 8. What is consumption as defined by the plans? Partial paralysis and interstitial death caused by the mycoderma aceti and other acid yeasts, growing in the blood, making thrombi which become emboli in the lungs and in turn the nidus of tubercle. This yeast comes from fermenting food in the small intestines, and hence becomes absorbed into the vascular system. Experiments with all our common foods show that nearly all, save beef, will, when exclusively fed on for forty to fifty days, ferment and infest the blood with the vinegar, lactic acid or other yeasts and cause tuberculosis. So long as food causes consumption it is in vain to expect to cure a case unless proper food is eaten.

For thirty-five years observers have noticed the bacillus of Koch living with the vinegar yeast. Botanists were divided in opinion whether they were inseparably a part of the life history of the mycoderma aceti, though nearly always found associated. Some botanists thought they were

indispensable parts, and some thought not. They are the babies of the vegetations and can be propagated as babies.

Item 9. Bacteriology makes no account of the morphology of consumptive blood as Dr. Salisbury does. It may point out bacteria, but it does not point out the following:

- 1. As to the red corpuscles. (a.) Their huddling and grouping together like frightened sheep. (b.) Their sticky and rotten substance. (c.) Their unrounded out, unplastic outlines. (d.) Their loss of ruddy color. (e.) Impoverishment.
- 2. As to white blood corpuscles. (a.) Their enlargement, usually sometimes enormously distended by the mycoderma aceti. (b.) Their increase in number. (c.) Their variation in size.
- 3. As to the serum. (a.) Fibrin filaments enlarged, thickened, stronger, more numerous and visible than in health. (b.) Mycoderma aceti in single spores or aggregated into oblong, sometimes double ended masses, forming thrombi and capillary emboli, specially in the lungs, where when held, the mycoderma aceti grows, increases, and acts chemically and mechanically in the tissues forming as a result of the life, chemical and mechanical action, a nidus for what is called tubercle, producing local paralysis and interstitial death, to name no more.

You know how useful this blood morphology has been in my practice and yours in giving the patient something definite to go for—i. e., the riddance of the yeast from the blood and the re-establishment of the normal blood morphology. You know how often after having got the blood normal, that in less than twenty-four hours it may be thrown back to the morphology of consumptive blood by the patient eating one teaspoonful of sugar or one mouthful of forbidden food. You know that foods for the consumptive are selected, not because they taste good, look good, and are recommended by loving friends, but according to how they bring back or not the morphology of consumptive blood. You know how patients are detected in lapses of diet by the blood morphology, and yet all this is more than a quarter of a century old.

Item 10. Bacteriology takes account of the sputum, but only to look for the bacillus. There is an advantage in looking for one thing; it gives a unity of aim, but it is recent. The plans here advocated have, for the past twenty-five years, included the entire morphology of the sputum as known. (See Morphology of the Sputum, Numbers 1—A; 1—B, Bibliography.) I can name only a few here: Elastic lung fibres, inelastic lung fibres, lumen of blood-vessels, mycoderma aceti, saccharomyces cerevisiæ when there are lung cavities, blood, giant mucous corpuscles, gravel of the lungs in fibrous consumption, to name no more.

These have been for years used as practical physical signs of the progress of the disease, and as points d'appui for patients to work from. For example, they can work to get them out, and do get them out by the food plans named. When they reappear, it is sure proof, nine cases out of ten, that lapses in diet have occurred, as they are quite sure to go when the diet is maintained. These clinical tests are to me irrefutable. I am sure it is a nice way for the doctor to know just how the necrosis is going on, and how to stop it, as I have done, am doing, and expect to do as long as I practice medicine. I hope you will follow in this.

I am aware that some will say that this is contrary to the conventional experience of the profession, but I say it is none the less true. Being true, it is right; being right, I am in a majority, as to be right is to be in a majority. Remember, my son, again, that your business is to cure if you can, and not to cure when you can is criminal. Hence, bacteriology does not present now to you the salient features you need for your work.

Item 11. Bacteriology does not use the morphology of the urine as a test of the condition of patients in consumption; Salisbury does. He aims to get the urine like a healthy babe's, nursing a healthy mother's breast—i. e., clear as champagne, 1010 to 1020 specific gravity, free from odor, no deposit on cooling. You and I have done this, too. Deviations from this standard show something wrong with the kidneys, liver, digestion or nervous system. Testing with

nitric acid helps out in showing biliousness. (See A—1; B—1, Bibl.)

Item 12. Bacteriology makes little account of the morphology of the skin. Salisbury does, and traces the vegetations of the skin. In consumption, no patient is cured before they have long disappeared. See Morphology of the Skin, No. 9, A—1; B—1, Bibliography.)

Item 13. Bacteriology does not tell how to feed in consumption; Salisbury does. (See A—1; B—3 and 13, Bibl.)

Item 14. Bacteriology points out no medicine, but is hard at work to find a bacillus or agent to kill the bacillus of Koch. The Salisbury plans point out the use of medicines as follows: (1) As oils to the machine. (2) Tonics to tone up the glands and system. (3) Digestives to help digest the food. (4) To meet complications, as hemoptysis, diarrhea, etc. (5) To put the skin in good order. (6) Hot water as a medicine to promote downward peristalsis—wash out, thin the blood, etc. (See B—20, Bibliog. Food as a Medicine. See Numbers A—1; B—3 and 13, Bibl., 10.) The having all medicines pure and up to standard, and testing all food preparations on one's own self before offering them to patients.

Item 15. To study bacteriology, one needs a laboratory, much time, special care, and instruments to practice with. The Salisbury plans, you know, need but a few things, though they must be of the best quality; and the results are at once manifest. I have thought they were like agriculture, which furnishes a field large enough for the exercise of capacities of the grandest and noblest, when provided with all that could be suggested in the way of mechanical, chemical and financial contrivance. And, on the other hand, agriculture may be successfully handled by farmers poor in resource, invention and ability. Any one who will live on baked beans, oatmeal, or army biscuit, exclusively, for three months (See A-1, Bibl.), whether he can use the microscope or not, will have some decided opinions on the subject. Facts are more than opinions not based on facts.

Finally, my son, have pity on the sick and dying. Try

to give honor to whom honor is due. Abate not one jot, but do not honor only people for doing things that are halfway procedures, when you know of, and can testify to procedures which cover the whole ground, and save lives which Sincerely your father, the others cannot save.

EPHRAIM CUTTER.

New York, The Ariston, Broadway and 55th street. September 18, 1888.

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ANSWER, BY JOHN ASHBURTON CUTTER, M. D., B. S., ETC.

Your letter of encouragement, information and commendation came to hand at a time when needed, to-wit: An old case of consumption, formerly under your care, had just had a pull back characterized by hemoptysis, hectic fever, sweats, etc., but of this more further on. You certainly are opposed to the conventional ideas of the day as to phthisis. but when I consider that you have been working in microscopy since 1850, and the practice of medicine since 1856: that you have positively cured cases of consumption, some of whom are alive to-day, after fifteen or twenty years' lapse since leaving your hands, and that these same food plans have helped me with cases, called by my honored and honorable teachers of the Faculty of my medical Alma Mater, incurable, I do not wonder that you are willing and anxious to inform me further as to food vs. bacilli in consumption. When I was a boy, preparing for college, you gave up a large country practice, and moved to Cambridge, and entered into the work of microphotography with great zeal' There was no money in it—instead, money out. But, if it is any satisfaction to you, I will say, that in all my medical studies, I have not come across any thing as to the etiology, diagnosis, and a means of watching a case carefully in the treatment of phthisis, which has been of so much value to me as the results of your efforts in microphotography. The plates are unique, elegant, clear, and tell their own story. I can only hope that they may be published as fully as Dr. Koch's researches have been.

This is not saying that the plates in Dr. Salisbury's monumental work, "The Relation of Alimentation and Disease," are not of value. Instead, they are of the greatest benefit. The only difference between his original work and your corroborative is, that he, a superb artist, made representations of morphology by the hand, and yours were made with instruments.

Again, as to conventionality, my associates wonder that I do not stain bacilli, etc. You and Dr. Salisbury say that there is no time to be used in staining bacilli, but to look

for the forms without using any reagents. In your clinical morphologies after Salisbury, I find in the partial syllabic list of the sputum, about 120 forms indicated; as some of the units of the number are only classifications of many forms, the number would run up in the hundreds, and I am compelled to take no time for staining, but see all I can,

aided by a good Tolles' microscope.

I am confronted by some who say that you are a "Salisbury quack," because you prescribe beef and hot water: one young man admitted that Dr. Salisbury could cure chronic diseases, but the feeling seems to be, that it is a poor plan to use about the same diet for many diseases besides consumption. If these gentlemen would examine "The Relation of Alimentation and Disease," they would find that there can be used as great, if not greater, delicacy in the prescribing of foods as any therapeutist would want. I will not speak here of your own work in drugs and chemicals, but will only state that my personal intercourse with Dr. Salisbury has shown him to be a man of far-reaching knowledge in the use of drugs. This can be substantiated by the examination of Dr. Salisbury's work with menthol. years ago; his chemical analyses in the '40's and '50's, under New York State Government observation, and his medico-legal expert testimonies at about the same time.

Salisbury began the study of Germ Diseases in 1849; you commenced the use of the microscope in 1850. He has worked originally in consumption, rheumatism, fibræmia, thrombosis, embolism, anæmia, syphilis, eczema, scrofula, malaria, variola, vaccina, typhoid fever, scarlet fever, diphtheria, fatty degeneration, cholesteræmia, carbuncle, leucocythæmia, measles, chronic diarrhæa, etc., etc., and you have also worked tremendously in corroboration, and in other lines originally. That you gentlemen have got all the truth, you do not claim, but, instead, invite all to come in and solve the problems which have vexed and are vexing the medical profession. You have had little recognition, though Salisbury's and my Alma Mater honored itself and him by granting him a prize for his essay on "Malaria." Your simile as to agriculture comes forcibly to me, as you

sent me to the Massachusetts Agricultural College to get the scientific training given there, instead of the more literarylike, which you received in the academies at Yale. morphologies can be used without great expense. You carry in your Cutter clinical microscope a Tolles' 1-inch objective, for which you paid nearly one hundred dollars. After much solicitation by you, Mr. Tolles made cheaper objectives, one of which (a one-fourth) I carry in my clinical microscope, and which cost only fifteen dollars. Dr. Salisbury and you pronounce it a good objective, for it does the work needed satisfactorily. The same can be said of Tolles' one-inch objectives. It would, of course, be very nice if I had microscopes and objectives like your superb collection. but that collection was necessary for you to show to the medical world that you were thoroughly in earnest, and used the finest instruments of precision then and now in existence.

It is not out of the way to state that in your microphotography, you devised a clinical microscope, costing but a few dollars, with which you took microphotographs, with the finest objectives, except the 1-75th. Here is another debt of gratitude I now gladly pay in small part, by my very earnest thanks, for your invention of clinical microscopes, one of which I have used with ease, despatch and precision, in dispensary (See "Some Facts Regarding Medical Missions and the International Medical Missionary Society," J. A. Cutter, M. D., Albany Med. Annals, May, 1888,) and private practice, in diagnosticating pre-tuberculosis, tuberculosis, rheumatism, fibrosis, malaria, syphilis, cholesteræmia, anæmia, etc., etc. I usually take this microscope in my hand-bag with scarificator, but have fastened it in a package with scarificator, behind a saddle, with absolutely no harm to the instrument; it is only necessary to see that every part is screwed tight.

But the trouble seems to be with these so-called Salisbury plans, as to their general adoption, that: First, Medical men condemn them in toto, as a professor did, who said to me that there was no such thing as tuberculous blood. "Are you willing to put yourself on record as to that, sir? Have

you studied the morphologies of the blood, sputum, feces, skin, urine, vomitus and foods for many years?" He replied that he hadn't, and hesitated after all as to putting himself on record as to his belief that there was no such thing as tuberculous blood. He then asked for proofs of these things. I called his attention to some of the work done and published, of which I find more in your bibliography, that there were the records of cases, and that I had shown him the proofs, and if he could not disprove them and would not believe them, I could do no more.

The second cause of the non-acceptance generally of these plans is: Physicians take a case of consumption and endeavor to treat it without any knowledge whatsoever of these clinical morphologies. I know you say that the ignorant may prescribe hot water and beef and cure diseases; but they fail often, as they cannot meet complications which a knowledge of these morphologies allows one to do; neither can they really start the case intelligently as to the use of adjuvants, medicines—oils for the machine, as you call them. Moreover, no one will ever cure every case that comes along, as you say, and if they lose the first case the treatment is condemned. Again, to put a patient on rigid diet, with the baths, medicines, etc., used, needs a physician whose patience must be great and who can look ahead for future results, for the road is often dark, and the patient despairs; if the physician cannot give encouragment the case will die. Here is another precept that I must thank you for: "That people want a physician when they are sick, and that he is not to come to them and tell them to get ready to die because their appearance is bad, but instead to encourage them to get well. While doing all you can with medicine, it is my personal experience that the use of these so-called "Salisbury plans" is a very hard matter, and no physician can be too well trained for the practice of them.

As a young man with the world before me, I have given in this answer some of the reasons for my faith, and can truly say that this faith is not without works, and that I have achieved ends in the short time that I have practised medicine which my medical alma mater (an institution re-

quiring three years of graded work for a diploma), never gave me the hope of reaching. I append a few case histories:

Case 1. In May, 1887, I was called from the Dispensary to see an old man living in one of the large tenement houses of New York. He was over sixty years of age, had been a longshoreman and was suffering from prostration, sweats and cough; slept but little. His blood showed the red corpuscles to be strongly massed together, fibrin filaments visible in abundance, and also vinegar yeast in masses. I do not remember all of the morphological features, but I made a diagnosis of tuberculosis and ordered the old man to eat all the animal food he could get, beef, tripe, etc. (cooked, of course), to drink hot water four times a day, to use ammonia sponge baths and, gave him a tonic of cinchona, nux vomica and some of the fluid extracts. I was in such a hurry that day that I did not examine his chest, but sent my assistant, Dr. H A. Minassion, a graduate of an American medical college, and also of Bellevue, to see him later, and he returned with the diagnosis of tuberculosis, and that the disease involved the upper part of the left lung. The old man stuck faithfully to what had been ordered, and greatly to Dr. Minassion's surprise, and somewhat to my own, as his surroundings were not of the best kind, he improved very much, and in August the lung lesion had nearly disappeared. In September I was called to see him, and found that he had been sick several days; had caught cold by sleeping next to an open window. A pneumonitis developed in the lower half of the left lung, and, despite all I could do, he died in a few days. He was a Catholic, or I should have made an autopsy to see how much of healed tissue there was in the upper part of the lung. (Dr. J. Solis Cohen once told me that he had seen one of Dr. Salisbury's cured cases, in whom there had been an immense amount of disease, and in whose lung were now cavities thoroughly cicatrized).

so diagnosticated by himself and an older physician. I was to take charge of the case till he bought a microscope. This I did, receiving almost daily specimens of urine, feces and sputum. The patient, a young man of good education, being a graduate of Amherst College, was married, somewhat short of funds, and had a great deal to worry him. He had not been told of his condition, but of which I speedily informed him. He went on to close diet, with tonics, ammonia baths and hot water, and soon was eating four pounds of meat a day. In January, 1888, Dr. — took charge The case had its ups and downs. In May or June Dr. — wrote me that he had not been doing so well, and that he thought he was going to die, as his surroundings were too much for him. "But if he dies, I am fully convinced that these plans have done him much good," he added. But he improved again, and the last I heard of him was that he had come to New York and called to see me, presenting the appearance of health. This case may die vet, as I am more convinced every day that patients should be under observation for at least two years, to get, as Salisbury says, confirmed healthy tendencies and nerve action, and remove bad physical conditions, inherited and acquired.

Case 3. June 12, 1888, I examined a young lady of 25, whose mother and a brother had died of consumption. She had been sick in the spring of what was called apoplexy. The red blood corpuscles were pale in color, diminished in number and ropy and sticky, so that they huddled together in masses. White blood corpuscles contained yeast spores, and in the serum were seen the mycoderma aceti free and in collects, beautiful crystals of cystin and uric acid and free fat. Urine was bilious, contained no albumen or sugar, but some fatty eptihelia were found with a microscope. She was so fleshy (weighing 248 pounds) that a satisfactory examination of the heart could not be made, but the diagnosis was pretuberculosis, latent rheumatism and obesity. She was put on the rigid plans of diet laid down in pages 122-126, "The Relation of Alimentation and Disease," [Salisbury] eating only the foods therein prescribed, using as medicines 1-20 gr. strychnia before meals, and five to ten gr. salicin after meals; biniodide of mercury, 1-66 of a gr. with hot water, ammonia baths, etc. There was great aversion to the hot water and meats, but the blood morphology became gradually that of health, except when she ate forbidden food, when the microscope would unerringly detect the lapse in diet by

the presence of the acetic acid plants in blood. She has had many pull-backs due to overwork and exercise, bringing her to bed with cold hands, feet and legs, pulseless wrists, pain in heart, head full of blood and pupils contracted, necessitating leeching or cupping. Hoffman's anodyne with chloroform used. Malaria has also been diagnosticated by the presence of the gemiasma verdans in blood, and removed by alteratives, salicin and quinine, the latter used very cautiously. She has now lost nearly sixty pounds of weight, and owns a heart, which beats with more ease and precision. Case in progress. The main point in this case is the detection and removal of the pretubercular blood morphology, both of which were done with ease and dispatch.

Case 4. A beautiful young girl of 18, whom I first examined May 15, 1888, complained of great nervousness and of inability to do all she wanted to do. She said: "I feel now while sitting in this chair as if I could not walk across this room, I am so tired." Her parents were wealthy and she had all that life could give. Her red blood corpuscles were pale in color, much diminished in number and adhered together in masses. White blood corpuscles increased in number. Serum showed fibrin and yeast. Diagnosis by blood examination, anæmia and pretuberculosis, first stage. She had been eating ice for a year; craved it, and had been told by her family physician, when informed of her desire, to eat all she wanted. This gentleman, a medical professor, had never examined her urine, but instead had contented himself with giving her a tonic once in a while. Her urine had a specific gravity of 1032, and careful and repeated tests with freshly made Fehling's solution, brought invariably a deposit of sub-oxide of copper. No albumen, oxalate of lime, triple phosphates and granular salts present. May 28 she went on to the rigid plans as laid down in pages 127-132, "The Relation of Alimentation and Disease," [Salisbury] with the exception that she did not drink the beef tea. The regimen was hard, but in a few days, despite the drinks of hot water, the amount of urine passed was but three pints daily, and in one week's time the sugar disappeared. She was importunate for bread, and was allowed two mouthfuls at a meal. Diarrhea came on, but was controlled by salicin. In four days the sugar returned. She was again put on rigid diet, i. e. no bread. Sugar again disappeared, and this time she kept longer on close diet. At the end of ten days she was allowed a little bread, and at the close of one month's treatment the sugar had not returned; the red blood corpuscles had increased in quantity, their color was brighter, the pretubercular elements had been starved out, and she felt that she needed no more treatment. Since the close of the treatment she has been in better health than for years, is no longer tired or nervous, craves no ice, and is thoroughly enjoying life. She may need further treatment, for I never believed that one month of dieting and medication would do what it did for her. But the facts are stated, and are of great encouragement to me.

Case 5. In May, 1887, Mrs. ——came to stay with us in New York to be under your care for one month for tuberculosis. Her father and a sister had died in 1872 and 1879, respectively, of fibrous consumption. You had cured her uncle of tuberculosis. She had been in poor health since 1879. Was married in 1881, and had borne two children. You found lung fibers in her sputum, an enlarged heart and tuberculous blood. Also an engorged, enlarged and misplaced womb, which was causing many reflex symptoms. The focus of disease (tuberculous) was through the middle, or just above the middle, of the left lung from before to behind. You treated her so that in one month's time the morphology of the blood became healthy; the cough ceased, the heart was beating normally, the uterine soreness and lesions had disappeared, and she went home a marvel to her friends and relatives, who had expected her to return from New York a corpse. You pressed on her the importance of remembering that she had done with her great resiliency what it usually took one year to do. In July you saw her at her home and fitted one of your stem pessaries to the womb, which she wore for four days, but by some exceedingly unfortunate accident the disc got out of place, and the pessary had to be removed. As she was nearly one thousand miles from you, she had to content herself with other measures you prescribed. During the latter part of the summer indifferent beef gave her diarrhea, and unavoidable family trouble made such a strain on her life forces, that she began to run down, though closely watched by you, by the study of specimens sent by mail; and in November, 1887, she came back to New York with her lung in about the same condition as before. From a cold caught on sleeping car she had an attack of congestion of lungs. She stayed with with us into January, when she felt it necessary to go home, her lung now being again healed, though the uterine lesion was not in a condition to satisfy you. On reaching

home that satanic spirit, which often infects servants, contaminated hers, and she was obliged to go into the kitchen and cook, with the result of another attack of congestion of lungs, followed by rheumatism. She became better, and one day while driving, her son, a boy of five, had to get out to pick up something lost in the road, and the horse becoming scared necessitated her pulling the boy into the carriage. In about two hours sharp pains came on in the womb, which were not relieved till she had used iodoform per vaginam and morphine by the mouth. All these things you doubtless remember. May 12th I came to make her a visit, and found her blood somewhat ropy, with some yeast present. She was then cooking, as no servant could be obtained. Did not feel well. As I was very tired, I did not examine her then for uterine trouble, for which I was very sorry afterwards. For in a few days she turned up with cerebro-spinal meningitis, characterized by chills in back, fever, dry skin, vomiting, rapid respiration, contracted pupils, headache and delirium. I tried the much-lauded morphine treatment, with the result that she got worse. Arguing that there was pressure on the base of the brain, I put two leeches on the side of head, and she became quiet, the skin moist and cool, the vomiting ceased, the pupils relaxed, the respiration normal and a natural sleep followed. But it was necessary to follow this up with more leeches, forty grains of calomel and small doses of bi-sulphate of quinine. She progressed slowly and steadily. The womb was enlarged and displaced at times-forward, then backwards, and at other times prolapsed. This last state must have been from the wrench received when pulling the boy into the carriage. She turned completely against beef, and ate fish, oysters, game and eggs against my earnest protest, as the blood morphology would not remain healthy. At times the uterine trouble would improve; but in September, finding that the cough was increasing, lung-fiber was appearing in the sputum, and the lung was giving evidence of necrosis in the same place as before, I had one of your Cutter No. 2 batteries made, of 8 plates of carbon, $8x1\frac{1}{2}x\frac{1}{4}$ inches, and 8 plates of zinc, $8x\frac{1}{2}x\frac{1}{8}$ inches. These were put in one pile, the zincs connected together, and the carbons in the same way. The battery was finished September 15th. She had in the meanwhile been on closer diet, eating beef, with some bread, but not enough of the former. And the date just noted she had a hemoptysis at 7:30, A. M., of about four ounces. I was away at the time. Another hemorrhage fol-

lowed in the afternoon, but soon after I had obtained medicines, and gave her bugle-weed and witch-hazel internally, using the persulphate of iron locally by spray. Hectic fever and sweats came on; large masses of lung-fiber were coughed up. She came down to close animal food diet; acid baths, with salicin, were used. There was crackling in the front of the left lung, and in the back could be heard the air bubbling amongst mucus in a cavity. But she has been making steady progress; the fevers and sweats ceased in five days. The lung has been, and is, healing. So today, four weeks from the time of these hemoptyses, there is no crackling in front, and behind the lung can be heard but a little rasping. This is marvellous, but is true to life. The uterine lesions have steadily improved since I have used the galvanic current from the battery. The plates submerged to one-half their length in the electropoin fluid. Two tablespoons were used as electrodes—the zinc electrode against the vulva, the other above pubis. One to one and a half minutes of passage of current. In fact, I find that it is better for me to take an electrode in one hand, and place the other hand above pubis. Thus current is painless, but relieves soreness and is reducing engorgement.

When I consider that twice has her lung been healed, and is now for the third time going through the same process, I feel the truth of what Dr. Salisbury has said, and what you have written upon, "food is an agent of tremendous power."

If she will stick to the diet, I believe she will get entirely well, as now her surroundings are such that there is every opportunity for her to do nothing but eat, drink and lay down new tissues.

I remain, with great respect, your grateful son,
JOHN ASHBURTON CUTTER.

Lynwood Stock-Farm, Harrod's Creek, Ky., Oct. 13, 1888.

ART. III.—Rise, Decline and Fall of the Devil. By M. A. RUST, M. D., Richmond, Va.

As soon as the much scrutinized, inscrutable anthropoid had passed the boundary line which separates man from other animals, the evolved homo-sapiens must needs have taken cognizance of the dangers and evils surrounding him. He dimly referred the cause thereof to the action of some occult and malignant power.

As fear is older than reverence, so bad spirits preceded good spirits.

In some ancient progressive communities, with higher development of spiritualistic conceptions (Parsees, Assyrians, etc.), we find, grafted on older and lower spiritual forms, an all-powerful, all-righteous supreme being, while at the same time the incongruity of the idea that all the evils to which mankind is subject should emanate from the same all-good being led to the evolution of a dualism in the ruling of the world—a division of power between a god of light and goodness, Ormuzd, and a god of darkness and evil, Ahriman. In this latter we behold the progenitor of our old acquaintance, the prince of darkness.

In classical antiquity the devil had at all times remained in an embryonic condition; the religion of the beautiful was no fit soil for a devil. Not good and evil, but beauty and ugliness formed the striking contrasts in the ideal life of the Greek. Moreover, in polytheism, where the government of the world, for good and evil, was divided into a multiplicity of departments, a devil would have been an unnecessary luxury.

The earlier Hebrews also had no devil; their tribal god, Jehovah (more correctly Yahweh) was the sole dispenser of good and evil. He inflicted and removed diseases at pleasure. "If thou wilt do that which is right," said he, to his chosen people, "I will put none of those diseases upon thee which I have brought upon the Egyptians." (Ex. iv, 26.)

When at a much later period we first meet with Satan, he appears as a subordinate officer of Yahweh. In the Book of Job (presumably composed at, or one or two centuries after, the Persian conquest), Yahweh and the devil discourse in a very cordial manner.

The establishment, at the side of Yahweh, of a devil, set forth as the sole originator of all evil, met with decided opposition on the part of the strict monotheistic school, as we learn from the protest of the Babylonic pseudo Isaiah: "Thus saith the Lord: I am the Lord, and there is no god besides me; that they may know from the rising of the sun and from the west that there is none besides me. I am the

Lord, and there is none else. I form the light and create darkness. I make peace and create evil. I the Lord do all these things." (Isaiah xlv, 6-7.)

In spite of this fierce opposition, the Persian devil—conjointly with many other Persian or Assyrian customs and religious notions—established himself in Judea, and we meet him now and then in Hebrew books composed after the Persian conquest.*

Whether the devil, with all his kin, and his legions of lesser devils, followed in the trail of the Jews on their return into Palestine from the Babylonic captivity, or whether he immigrated thither at another period, we are not prepared to tell. Albeit, at the time of Christ, the blessed little land was full of obstreperous demons. But even the devil cannot withstand the overpowering action of environment: in the medium of the Judæan populace, the once haughty, mighty anti-god Ahriman, who with unrelenting rigor had wielded his sceptre over the vast empires of Persia, Media. Assyria and Babylonia, subsided into a flinching, skulking devil who, when frightened, did not disdain, on one occasion, as we are told, to take refuge in a herd of swine. From Matthew to the end of the Revelations, the Book of Books superabounds in tales about devils and demons, but no great devilish deed is to be found among the number. Satan's main sport seems to have consisted in entering the bodies of the unblest and tormenting them with convulsions, palsy, fever, etc.

It is worthy of notice that demons, when inflicting diseases, generally visit the body in squads of seven. "Then goes he and taketh unto himself seven other spirits, more evil than himself, and they enter in and dwell there." (Matt. xii, 45; Luke xi, 24, etc.) These same weird seven are apparently a transcript from Assyrian demonology, the original thereof having been disintered only a few decenniums ago. Among the piles of tablets excavated from the

^{*} The author of the Book of Chronicles (composed about three centuries B.C.) shows his belief in the devil when, in transcribing the shocking tale of 2 Sam., xxiv, he changes the first verse thereof so as to make it read: "And Satan stood up against Israel and provoked David to number Israel." In Sam. it is Yahveh himself who provokes David.

sunken cities of Assyria, especially from Ninive, which bring to light the records of thousands of years before our era, there have been found *votive tablets*.* One of them reads as follows: "God shall stand by his bed-side. These seven evil spirits He shall root out and expel from his body. These seven shall never return to the sick man."

After the destruction of Jerusalem, when Judaism, commingled with Parseeism, Paganism and Buddhism, had become Christianity, the devil followed in the wake of the triumphant new religion, and gained, wherever the cross was planted, firm hold on the minds of men.

Thus the Persian anti-god Ahriman begot the Judæan Satan, and the Judæan Satan begot the Christian devil. All of them came into being, not with a bound, but by

gradual becoming.

The Judæan Satan, or devil, presents a profound deviation from the paternal type. In Palestina the offspring of Ahriman is no longer a god; he has degenerated into a mischiefmaking foot-boy of Yahweh. But the specific atavian strains reappear in the Christian or mediæval devil. Just as his grand parent Ahriman, from the beginning, endeavored to destroy or to damage the creation of Ormuzd, so the mediæval devil unceasingly attempts to overturn the spiritual kingdom of Christ.

The backbone of our devil is formed mainly of the received Jewish-Christian legends; a multiplicity, however, of other new elements entered into his structure.

The Christian clergy found the belief in spirits, in magic and sorcery, deeply interwoven with the thoughts and actions of the ancient world; they found the religion of Teutons and Northmen teeming with sprites, goblins, gnomes and imps. Unable to extirpate these figments, they made them subservient to the sustenance and the increment of the devil. Again, the appearance of a new god was to the heathen world, inured to polytheism, less perplexing than the predicated disappearance of the old gods. Unsuccessful in totally expunging the ancient pagan and northern gods,

^{*} These votive tablets were, according to custom and belief, suspended, for the benefit of the sick, on the walls of the temples.

the Christian missionaries at least succeeded in utilizing them as materials for the construction of diabolism.

The development of the mediæval devil—that portentous, monstrous figure in which awfulness is so oddly dashed with a peculiar vein of drollery—is the work of centuries. His cast of mind, his proclivities and tendencies, his bodily shape, were gradually evolved by adaptation to environment. Among Teuton peoples he acquired the humorous trait in his character. In the 13th century he was indeed the ideal of human depravity and human hideousness; he had the long tail of an ape and the membranous wings after the pattern of a bat; but the horns on his forehead had as vet not grown, and the metamorphosis of his lower extremities into the legs of a goat had not taken place. Many of his famous characteristic qualities were at that time still undeveloped. His identification with the etiology and pathology of hysteria, epilepsy, lunacy, and other neuroses; his pernicious predilection for intimacy with queer old women; his baneful passion for seeing them take a midnight ride on broom-sticks, high up in the clouds-all that did not crop out till about the 15th century.

It is impossible, in a short paper like this, to expatiate upon the ways and doings of the devil, and we must refer to the piles of old chronicles, to Sunday-school teachers, and to Grimm's Fairy Tales. But the point upon which we have just touched, viz., the particular relation of the devil to nervous disturbances, to old women, and to other select classes of people, is of such thrilling interest, medically, psychologically and sociologically, that we cannot forbear dwelling upon it for a minute.

The creed of witchcraft and diabolism received its strongest impulse and support from the bull of Pope Innocent VII (1484). Its logical upshot were the fires which blazed in every town during more than two centuries, consuming the victims of maddened justice by the hundreds, by the thousands, in every place and every year.* A multitude of Manuals were composed, expounding the methods of detect-

^{*} Spengler estimates the total number of witches burned in Europe at nine millions!

ing and entrapping witches. Unique in the infamy of its teachings stands the notorious book, *Malleus Malleficarum*, the "Witch-Hammer." We see once more that inhumanity and piety can be good bed-fellows.

Witches, unbelievers, heretics were possessed with the devil by their own consent, by compact. The devil had to be destroyed by fire together with the vessel—the miserable human frame—holding him.

There was another class of cases—hysteria, epilepsy, lunacy, among the number—in which the devil had taken his abode in the human body without a permit from the owner. In these cases—and it must have been a diagnosis of great nicety—recourse was had to conjuration, exorcism -casting out the devil. Contemporary Manuals of Exorcism contain a variety of formulas in use. Often the monk or priest began by introducing himself to the devil or devils: "I, a priest of Christ, command thee, most foul 'spirit, to depart out of the body of this God's creature." Then followed a flood of such epithets as, "beast of all beasts," "filthy sow," etc., alternating with the most pathetic exhortations. This failing, recourse was sometimes taken to fumigations—the devil was smoked out, mostly by means of malodorous fumes. Excrements of animals, hoof-parings, fish liver,* assafætida,† etc., were used.

An analagous ritual had heretofore been practised for expelling from the upper air the devilish legions who gen-

^{*} About twenty-two centuries ago, young Tobias received from an angel the recipe for smoking out the devil with fish liver. The betrothed of Tobias had been married seven times, and each of the seven husbands had been killed in the marriage-chamber by a lustful, jealous devil who dwelt there. Tobias applied the fish liver with such good effect as to make the diabolic Lothario fly to Egypt. (Tobit, chs. vi-viii.)

[†] Assafce ida, once applied in fumes for expelling the devil from hysterical women, is at the present day still in use and swallowed in the shape of pills for dispelling hysteria. There seems to be not much more reason and not much less mysticism in the one method than in the other. The physiological action of the drug is illustrated by the experiments of Trousseau, who states that, after swallowing half an ounce of assafcetida, he felt no other inconvenience than the vilest smell about himself and from all his secretions, lasting for forty-eight hours—a stench so insupportable that he would fain have parted company from himself.

erated gales and hurricanes, blasts of hail and thunder-storms. The devils, wherewith the air and clouds were full, were exorcised and commanded to disperse themselves into the distant wilderness. By malodorous fumigations on a large scale the ceremony was rendered still more impressive. Nevertheless the devil continued to wield, detrimental to man and beast, the thunderbolt he had wrested from the fallen gods Thor and Jupiter. Various means of protection were resorted to: holy water, relics, amulets, Agnus Dei, processions, etc. The ringing of baptized and consecrated churchbells seems to have proved the most efficacious. At the clang of these consecrated bells the devilish legions flew in terror.

We let the curtain drop. What has passed before our eyes was like a mirage from a foreign world!

Among the factors which cooperated in the development of the devil, the productions of artists, poets, and playwrights occupy an important place. The creations of genius gave to the hazy and confused popular imagery, form, color, and feature. On the other hand, these creations were, and could only be, the outcome of the environment wherein they arose—the idealizations of the prevailing diabolic conceptions.

The grandest pictures of the devil are those of Dante, Milton, and Goethe. Each of these sublime productions arose in a different social medium and bears the marks of the different surroundings.

Dante and Milton were believers in the devil, whilst with the divine unbeliever Goethe the devil is already a myth.

At Goethe's time the waning devil had ceased to command respect. When he appeared on the stage—in the popular plays performed on the public squares—in full dress, with tail, horns, cloven hoof, black, hideous face, fiery tongue and blood-red eyes, he was hissed, hooted and pelted, shouted and laughed at. (I recollect how we boys were delighted when, in the last act of the puppet-play, he invariably got a sound drubbing.)

Gradually the devil became rather an object of fun than of fear. He has now vanished; not by force of philosophical

explanations and arguments, but in consequence of a strong sense of the profound absurdity of such a hideous belief.

Devil and hell are gone, because of their incompatibility with the more humane sentiments of advanced culture. Their counterparts—heaven and immortality—will stand, because of their harmony with our ideal wants; because, at the present stage of brain evolution, mankind cannot afford to resign these most exalted aspirations.

ART. IV.—Phenacetine, an Antifebrile and Antineuralgic. By W. M. HOLLADAY, A. B., M. D., Hampden Sidney, Va.

Having heard of this new drug through the pamphlet of W. H. Schieffelin & Co., I determined to try it, and have been so pleased, that I wish to let others know of it, even though the number of cases in which I have used it, has been too few to offer any basis of generalization.

"Phenacetine is an aceteyl compound of phenetidine, *i.e.*, is of ethylic ether of paramid-phenol, and is represented by the formula:

 $C_6 H_4 \left\{ \begin{array}{l} OC_2 H_5 \\ NH (CO-CH_2) \end{array} \right.$

It is therefore analogous to antifebrine (acetanilid." Wiener Med. Wochenshrift, 1887.

It is only slightly soluble in hot or cold water and in the gastric or pancreatic juices. It is said to be an efficient antipyretic, and a good antineuralgic.

The discoverers, Dr. O. Hirsberg and Prof. A. Kast at Freiberg, found in their experiments on dogs, no effect on the circulation or respiration, but in larger doses (from 45 to 75 grs.) it accelerated respiration, gave rise to nausea, vomiting, somnolence, and a cyanotic condition of the buccal mucous membrane. They found in some cases methenoglobine as in acetatanid poisoning, but all the animals recovered.

I have used the drug as sold by Schieffelin & Co., not as an antipyretic, but as an antineuralgic.

It was composed of perfectly white crystals, tasteless as it was insoluble in the mouth.

The first case in which I used it was that of a neurotic girl, with intense facial, as well as visceral neuralgia. I had given morphia, for relief of pain, both hypodermatically and by mouth, but with only transient relief; then I ordered phenacetine in six grain doses, every three hours, with relief of pain in half an hour, and some narcotic effect. The patient was "very happy" and very loquacious. At the expiration of two hours, the pain returned, but not so severely as before. The dose was then repeated with about the same effect as before. One thing was noted, that the pain was less severe after each dose when it did return, and after the sixth dose there was no more neuralgia.

I next tried a single dose on myself, 10 grains for a severe headache; no effect was noted, except the headache was re-

lieved.

I have prescribed it in five cases of headache, with uniform relief—in four cases relief in half hour, but in one not for two hours.

It was given in three cases of neuralgia, with uniform relief. In the second case it was given with the same intoxicant effect as in the first; the young man said he "felt good." This was a case in which I had formerly given antipyrin and morphia, but the effect of the phenacetine was quicker, more pleasant and lasting than with the other antipyretic. The third case of neuralgia felt no effect beyond the relief of pain; he described the taste "as of moonshine."

I have given phenacetine in one case of "pelvic cellulitis" after delivery, with reduction of temperature, but no

relief of pain.

As I have said, I have used it in too small a number of cases to form any generalization; but think from what I have seen of its use that phenacetine is worthy of trial, and may prove useful in a number of conditions. For neural-gias, it has so far acted well for me. I have always given it in small doses from 6 to 10 grains, but would have tried larger doses if the small doses had not given the expected relief.

Germain Sée in Sommaire Médicale, says that phenacetine is probably stronger as an analgesic than antipyrine or antifebrine.

It has been recommended in acute rheumatism. I do not know whether a tolerance of the drug is acquired or not by continuous usage, but I should think it is, from the analogy of its effects to those of acetanolid, in cases where it had to be continued for a long time.

Some observers have not noticed an intoxicant effect, but from its effects on two of the few patients to whom I have given it, I am convinced that it is an intoxicant. These two patients described the effect as so pleasurable. Hence I fear there might be danger of a phenacetine habit.

Given in daily doses of from 90 to 120 grains, phenacetine has been known to produce cyanosis, but in smaller doses, not exceeding 75 grains, no such effect has been observed. So far, no death has been attributed to its use, but it may be as dangerons as its analagous compound acetanolid, and at first should be used cautiously.

Clinical Reports.

Ovariotomy in a Lady 64 years of age—Tumor weighing 63½ pounds—Recovery. By JOSEPH TABER JOHNSON, M. D., Washington, D. C., Prof. of Gynecology Medical Department Georgetown University—Gynecologist to Providence Hospital—Fellow American and British Gynecological Societies, etc., Washington, D. C.

Mrs. M, white, aged 64, mother of several children, was sent to me by my friend Dr. N. S. Lincoln, on the 10th of last September, on account of a very large abdominal tumor.

I heard that she had been under the care of a homeopath for several months, who had promised to cure her with his little pills. She had been told that an operation would be certain death, and was advised never to allow herself to be touched with a knife. The tumor had been growing about two years, when first noticed. Mrs. M. was Matron of the Soldiers' Home at Hampton, Va.; she was able to perform her duties for a year after it first made its ap-

pearance. After a time, however, she became so large that she was unable to longer superintend the affairs of the Home, and the very kind officers of that institution gave

her a sick leave for a year in which to get well.

She came to Washington and fell into the hands of the homeopaths. After failing to relieve her, and her size being such great burden, she was finally tapped. This operation was repeated five times at varying intervals. These operations only partially reduced her back, and she suffered so much as a consequence of the tapping, that further efforts in that direction were abandoned. She was told that any further operative interference would be instantly fatal.

In the state of mind produced by this information, she sought the advice of the distinguished surgeon, Dr. Lincoln, who kindly referred her to me for a radical operation.

I found her bolstered up in an easy chair, with the abdomen enormously distended, so as to greatly interfere with respiration. She was unable to walk more than a few steps Her legs and feet were so ædematous as to be scarcely recognizable, as also her hands, arms and face. Her urine upon

analysis contained no albumen.

A day was at once fixed for an operation, but before the day arrived, the distension was greatly increased, and it became necessary to operate before Dr. Lincoln returned to the city from a trip to Niagara Falls. A number of my friends who knew of her condition begged me not to operate as the old lady, they thought, had no chance for recovery, and I would ever injure my record and do her no good. Believing that she had a chance, I thought it was my duty to give it to her. She argued, that as further tapping had been pronounced not only useless, but fatal, a radical operation could not add to her danger and might possibly restore her to health.

When under ether, the patient became very cyanotic, but as soon as the abdomen was opened, and the fluid removed, she rapidly recovered. The removal of the multilocular ovarian cyst presented no unusual difficulties. The various compartments of the tumor contained about all the kinds of ovarian fluid, viz., brown, amber, clear, thin, thick, etc. As the tapping trocar had only entered one lobe of the tumor, it now became evident why her size had not been greatly reduced.

The patient was put back in bed, in a very good condi-

tion, and made an uninterrupted and perfect recovery. A good deal of redish serum came out through the drainage tube for a few days, but I was able to remove it on the sixth day. She was up in three weeks, riding out in a month, and has now returned to Hampton, and is again performing her duties as Matron of the Home.

I have now had a series of 39 ovarian operations with only one death. Several of the cases were forlorn hopes, but they were all saved but one.

It is a great temptation to decline doubtful cases and thus save our statistics; but I have never yet refused to operate in any case on account of my desperate sympathies, and some of the most dreadful cases have turned out to be most brilliant successes; notably, one lady, the wife of a clergyman, who was brought to my private hospital on a mattress. She had not walked down stairs for three years, nor across her room for a year. The removal of a hematosalpynx and an inflamed ovary has made her a well and happy woman.

An "Hour-Glass Bladder," having Many Sacs, etc.* By E. L. DETWILER, M. D., Herndon, Va.

I was called on the 22d of July, 1888, to see Mr. A., age 69 years. He had just returned from California, where he had resided for some years. His health had been quite good until about ten years ago, when it was said that he had an attack of typhoid fever from which he never fully regained his former vigor. He had married quite early in life, and for some cause did not live with his wife for a number of years prior to his death. I noticed a well marked scar of a chancre on the glans penis. He said that it had been burned by caustics, and that he took medicine, and that secondary symptoms did not appear. There was also a large cicatrix on the prepuce where he claimed a "cancer" had been extirpated by a surgeon, but which in all probability was a venereal growth of some kind. He furthermore stated that he had had gonorrhea four times in his life—the last time four years ago. For the last three years he had been a constant sufferer from gastric and uri-

^{*} Read before the Fairfax County Medical Society, Nov. 1, 1888.

nary troubles, incontinence, pain, etc.. He was very much emaciated when I first saw him—principally as a result of dyspepsia, and the bladder and urethral troubles which existed. He denied ever having had stricture or any difficulty in passing his urine, save the pain in the glans penis and neck of the bladder. He suffered from a fever of the septicæmic type, coming on distinctly periodically and followed by sweats. He claimed he had chronic malaria This may have been so, but I thought the fever was fully accounted for by the existing state of affairs found in the bladder, urethra and stomach.

On about the third day after I took charge of him his scrotum began to enlarge on the left side, principally along the spermatic cord, and my first opinion was that it was a case of hydrocele of the cord. Light was transmitted through the scrotum, and, when in the erect position, the most of the enlargement was at the top of the scrotum; but I soon found out that this diagnosis was not correct, as the fluid

contents seemed rapidly to degenerate into pus.

On the 29th of July, I opened the abscess by making an incision about two inches long, and evacuated about one-half pint of pus, of a very offensive character, and quite large sloughs of tissue. The cavity was then syringed out with an antiseptic solution (one-tenth of one per cent. of corrosive chloride of mercury). From the moment of the operation the swelling went rapidly down, and the scrotum was soon at its normal size.

But about August 1st water was noticed to trickle through the cut when he urinated. I then concluded that he had a stricture, notwithstanding his denying it on several occasions. I accordingly explored the urethra, and found a small one near the meatus, and another of considerable size in the membranous region, which I could not pass with an ordinary acorn-pointed sound, and I had great difficulty in even introducing a filiform bougie; but when the passage was finally accomplished, a Gouley's dilating sound was threaded over it and introduced into the bladder. I then introduced sounds gradually increasing in size until an eighteen (French scale) passed. He was then not molested for four days, when I still farther dilated it up to 21. He did not seem to suffer any constitutional disturbance from the operation. He was given full doses of morphine and quinine after the dilatations were over, and wrapped up warm in bed.

From the time of the first operation the urine passed

through the natural way, and none came by the fistulous opening made by the operation. His treatment was from the first a nutritious and wholesome diet, principally milk, fresh underdone beef, soft-boiled eggs, etc. Quinine and iron were given as a tonic, and solution of citrate of potash as a diuretic. He also was given small amounts of stimulants when much depressed, and a solution of boracic acid to act as a purifying agent on the urine; and when the pain at the neck of bladder was severe, opium in some form was used.

A somewhat curious complication was noticed just here. The left parotid gland began to enlarge, and for a while we feared it would suppurate; but cold lotions and the application of Prof. Wm. II. Pancoast's therapeutic knife caused it to disappear. I thought that the probable cause of the enlargement was the sympathy between the parotid gland and testes.

I would like to say just here that I think the frequent touch of the "therapeutic knife," as advised by Dr. Pancoast, to enlargements of that kind of bruises and congestions is equalled by no other treatment. It has certainly a very good effect, especially where the surface is dark, showing stagnation of the circulation.

But gradually my patient became more and more exhausted, and on the 17th of August he died—principally from inanition and general debility.

An autopsy was asked for and granted, the result of which

was as follows:

Stomach was dilated to some extent, and contained about half-pint of fluid. A heavy coating was over its mucous surface. The mucus and fluid were both of a greenish color. A slight thickening around the pylorus was observed; but aside from this no other abnormality was noticed. Liver and spleen normal, with the exception of a few dark colored spots on the spleen. There was quite a collection of hardened feces in the ascending colon, but the bowel was otherwise normal. Right kidney normal; left contained about half-ounce of a thick light-colored fluid in its pelvis, and the ureter was somewhat enlarged. Probably the trouble extended upwards from the bladder. There was also a darkcolored spot on the outer and lower curve of the same kidney, probably due to the plugging of an artery or urinary tubule, as its apex was in the pelvis and base at the periphery of the organ, thus making a wedge-shaped or coneshaped lesion.

But what was very remarkable to me, and what caused me to report the case, was the condition of the bladder. was very much thickened and enlarged. I judge that it would weigh about a pound, and all over its internal surface were seen small sacs or pouches which have been described as forming the "sacculated bladder." I should think that there were as many as twenty or thirty of them, varying in size from a wheat-grain up to a chestnut and walnut, but only one of the latter size. The bladder was almost divided into two (about equal) apartments or cavities by a contraction in its centre which caused it to resemble an hour glass; and at the top of the upper cavity was the pouch the size of a walnut referred to. The opening between the two principal cavities was just large enough to admit the point of my index finger; the openings of the other cavities or sacs varied in size from that of a knitting-needle up to a lead-

pencil.

Now these cavities, in my opinion, may have been formed in one of two ways: Either by the contraction of certain parts of the inner surface of the bladder by severe inflammation, thus forming a band or a sort of pouch, while the pressure back of urine in the bladder, due to the urethral stricture, caused the vesical walls to enlarge by distension into the pouches described. Or else the muscular fibres of the bladder may have been so thickened and enlarged that they stood out in ridges and left thin spaces between them, while the urine pressure in the bladder (resulting from the stricture) caused the partial giving way of the submucous vesical tissues, and thus to bulge outwardly, carrying with the distension at various points the outer coat of the bladder and its peritoneal covering. But I can hardly account for the large pouch on top. I hardly think it could have been formed that way, as it was almost as large as the lower end of the hour-glass, and had quite thick walls-much thicker than some of the smaller sacs. All the pouches were full of a thick, foul-smelling, pus-bearing urine. No stone of any kind could be found. At the neck of the bladder there were evidences of chronic inflammation, with enlarged prostate and fistulous openings leading out from the urethra just outside the sphincter vesicæ and behind the stricture.

Gorrespondence.

Examine all Non-Graduates.

Mr. Editor:—I suppose every Virginia doctor in good standing is convinced that the law to regulate the practice of medicine and surgery is a good one. It is a step towards protecting the people of Virginia, and skillful, competent physicians. It is adding to the dignity of the medical profession, raising the standard of medical colleges, and sending forth only such men as are well qualified to administer to the wants of the sick and suffering. But while the law as it now stands has accomplished much good, I believe it can be amended so as to prove of greater benefit to the people and profession of our State.

It seems to me that all the practitioners who are nongraduates should be required to undergo an examination before the Board. Prior to January, 1885, any one 21 years of age or older, graduate are non-graduate, could by paying a small fee, obtain license to practice medicine. There were many of this class in our State, and because they were licensed before the date above mentioned, they are permitted to continue practicing the profession. Why are these men who have never graduated in physic, many of whom never attended a medical college, allowed to go on humbugging the ignorant laity and thus interfering with the business of respectable practitioners? This question, it seems to me, is a pertinent one. It is highly important that some step be taken to drive out of the field every man ignorant of medicine, and therefore utterly unfit to attend to the wants of the sick. If all the doctors who love their profession will do their duty, I believe such an end can be attained at no distant day. We ought to seek diligently to stop these charlatans from interfering with our profession.

Since the creation of the Medical Examining Board, it has been clearly demonstrated that some of the most prominent medical colleges in this country graduate men who are totally unfitted to practice this, the noblest of all professions. Why should not all the doctors in Virginia be required to

pass an examination similar to those given graduates of today? If holders of diplomas from respectable medical institutions sometimes give the most absurd answers to simple questions propounded by the Board, is it not reasonable to suppose that many of the older graduates are as incompetent to stand the required examination? Since, I repeat, it has been proved, beyond a doubt, that colleges do, even at this day, turn out incompetent practitioners, we are forced to conclude that the same thing was done repeatedly before the enactment of the present State medical law. If all the doctors in the State will submit to the examination, quacks and incompetent physicians must go to the rear.

R. N. G.

[NOTE BY EDITOR.—This matter has been inquired into, and the question has been decided to be legally impracticable. We publish the above letter and this note because many personal letters for the past three or four years have made similar suggestions.]

A New Method of Protecting the Air-Passages from Yellow Fever and Other Zymotic Diseases, Germicides, etc.

Mr. Editor,—About five years ago I began to think of some mode of protecting the air-passages (nose and mouth) against zymotic diseases, especially yellow fever. I thought of various devices, and finally meeting a countryman with an immense moustache, it occurred to me to use this method. I had a moustache made of Chinese hair, and tried various antiseptics and deodorizers, but found nothing that would answer the purpose. Three things were necessary: Ist, That the drug should be harmless; 2nd, That it should not irritate the lungs; and 3rd, That it should be in such a form as not to require too frequent application.

Recently I succeeded in finding a combination that seems, from the few experiments I have made, to answer all these points perfectly. The application need not be applied more than once in forty-eight hours. It is probable it will last seventy-two hours or more. I made one application to the outside of the moustache and hung it up in a room near an open window for three days, and it had lost but little of its

odor, which, indeed, filled the room when the windows at night happened to be closed. This is the recipe:

Ry.—Spts. terebinth	
Ol. olivāā	3i.
Thymic acid	žiij.
Vaseline	3ss—Mix.

The vaseline was added to increase its viscidity, but I

think it probable that it may be dispensed with.

I have worn the moustache thus charged for hours, and have slept with it on, and find the mixture entirely unirritating. Indeed, I thought it pleasant and soothing to the air-passages. The turpentine, if it comes in contact with the nose, may, for a few moments, produce a little irritation, but it amounts to nothing. On adding the thymol to the turpentine the odor of the former was completely destroyed; but in a day or two it returned in full force, and when the mixture is spread upon the moustache the odor of both is very distinct.

I have as much faith in these two antiseptics as in any other I know of. I have used turpentine for thirty years in hospitals and in private practice, and if we really have any germicides (and I hope we have), I am as willing to trust turpentine as any other known. Its use in open cancer is more satisfying than anything I have ever used. The healthfulness of the pine forests of North Carolina is well established.

To disinfect the air of a town is of course an impossibility; to keep it disinfected is certainly impossible; but to disinfect each inhabitant may be possible. To give this method a fair trial the man will have to drink water boiled, and eat food that has been well and recently cooked. It would be better to take food outside of the hospital. It is not at all difficult to eat and drink with the moustache on, but more agreeable to take it off.

If this mixture will protect against yellow fever, it would protect probably against all other zymotic diseases. It might be used also to administer volatile medicine to adults having lung trouble.

The advantage of its trial in yellow fever is that this dis-

ease is brief in its stay, and the inconvenience of wearing the moustache would be of short duration. The moustache and medicine can be gotten, I suppose, for fifty cents, and would last for a season at least.

I had a moustache made here four years ago by a hair-dresser. It is not very large, but thoroughly protects the nose and mouth.

As small-pox is by far the most contagious of all known diseases, the severest test could be made by this method, to-wit: expose three or four unvaccinated men who would agree to wear the moustache, in a room with a case of small-pox for four or five days in succession, and if no one takes the disease the proof would amount to a demonstration. A few hundred dollars would procure the subjects for this experiment. If one man should contract the disease, immediate vaccination, on appearance of fever, would avert the attack.

The mixture above mentioned, after being kept about two weeks, lost its thymol odor. The bottle was well stopped, but the fact remains. Since then I have been varying the mixture. As the turpentine seemed to destroy the thymol, I diminished the quantity of the former. I had also two trial bottles prepared, one with the thymol and sweet oil and another with turpentine and sweet oil. I put some of the contents of each bottle on the moustache at the same time; but, on further trial, I think the following mixture will answer the purpose so far as I now can see:

Prof. Tyndall states that raw cotton applied to the mouth of a bottle prevents the entrance of germs. I made a moustache of absorbent cotton, and it seems to answer about as well as the Chinese hair. I take a roll of cotton (the ordinary raw cotton will do) $3\frac{1}{2}x2\frac{1}{2}$ inches, and enclose it in a small piece of mosquito netting, and tie each end; to these ends I fix an elastic strap, as in the case of the moustache. I apply the mixture on the outside of the cotton, and I find it lasts (that is, the odor,) twenty-four to forty-eight hours.

This suggestion has the recommendation of cheapness and convenience, and, of course, is harmless. The trouble with children is to get them to wear the moustache. If the turpentine irritates the nose at all, a little vaseline or cosmoline applied before putting on the moustache will quickly remedy this trouble. In regard to the Chinese hair, you can wash it out daily with soap and water without injury. It is sewed on to a soft piece of leather. As the mixture of turpentine and thymol seems not to be fixed, I suggest that further experiments be made in this line. There is no question, in the present state of our knowledge, that the best plan is to try and protect each individual.

The first mixture (to-wit: 3ss each of sweet oil and turpentine; thymol, 3j; vaseline, 3ss;) was opened to-day (10th day) and the odor of thymol was very distinct. Since last report I had added 3ij water and 3ij of thymol. If this mixture is inspired very rapidly I find it irritates the lungs. But the last mixture, to-wit: thymol, 3j; turpentine, 3j; and sweet oil, 3ss, I have been using several days, and no irritation whatever ensues. The odor of both turpentine and thymol is very apparent. I have slept with the moustache on.

W. W. Parker, M. D.

Richmond, Va., November 19, 1888.

Typho-Malarial Fever.

Mr. Editor:—There are many points of interest in the discussion of "Atypical Forms of Typhoid Fever," which took place during the recent convention of the Medical Society of Virginia in Norfolk, Va.

The remarks of Dr. J. Herbert Claiborne, of Petersburg, (a gentleman for whom I entertain the highest respect and esteem, personally and professionally), as reported in the Journal of the American Medical Association, as also in the New York Medical Journal and the Virginia Medical Monthly, have especially attracted my attention

The Doctor asks *imprimis* what is meant by *atypical* forms? In other words, what deviation from the norm is to be al-

lowed without the diagnosis being strained? This is a very pertinent question, and a far-reaching one, timely put. And vet, it seems to me, if we reflect carefully upon it, there is

no great difficulty in answering.

Diagnoses, as I conceive, are made, not from one symptom, nor two, nor three; but from an ensemble of symptoms and signs usually accepted as pathognomonic. We can scarcely expect in any given case to find all present; yet we must not always, therefore, hesitate or doubt. If a "quorum," so to speak, can be obtained, or recognized—a "working majority" of them all-I think we should proceed with confidence.

This experienced and accurate observer of diseases then enters upon a series of comments, entirely just, so far as I am capable of judging, in reference to his own section of country, where the poison (a germ) of typhoid fever is comparatively uncommon, upon the use of the words "typhomalarial"—a creation of Dr. Woodward, which, as Dr. Claiborne says, was a subject of recantation on the part of its author, but has nevertheless survived him. Yet, according to modern theories, the "fittest," only survive"; and I sincerely believe that this word is one of the fittest, although, perhaps, not in the exact sense implied by its author.

I cannot agree with Dr. Claiborne that the "concurrent, or coincident, cultivation of the microbes peculiar to each" of two, or perhaps more, diseases of the human organism, is beyond the range of rational hypothesis. Arguments drawn from analogy are notoriously fallacious; yet I respectfully

submit the following illustration:

In the doctor's many consultation-visits to the country about his city residence, I know that he has often seen a field of wheat polluted by a variety of "tares" of different species,—cockle, spelt, partride-pea, etc.,—all thriving to-

gether at the expense of the crop.

We know little or nothing of the microbes of which authors write so fluently, except that we cannot doubt their existence. As in chemistry, the atomic theory comes nearest to explaining the phenomena which we observe in nature, so the germ theory most nearly interprets the riddles of pathology.

But germs are germs, whether animal or vegetable, and general laws apply to both kingdoms alike. "This deponent" had once, himself, been the subject of mumps (at that time prevalent in the neighborhood), for three or four days when attacked by scarlatina (diagnosis made by a physician of culture and recognized ability.)

In this city I rarely meet with a case of typhoid fever, pure and simple; but I do meet frequently with instances in which the two poisons of malaria and typhoid seem to concur and coincide. The touchstone to which the Doctor alludes, the exhibition of the "great antiperiodic," modifies the condition, by throttling the one set of germs, but the other germs go on to their full development.

In these cases I find the "mild mercurial, guarded or not, by opium," in carefully adjusted doses, to answer admirably—in fact to be indispensable; but, as to the acetanilide or antipyrine, I am exceedingly cautious in their use. There is quite enough tendency to collapse, inherent in these cases, without courting their agency in that direction.

Geo. Byrd Harrison, M. D.

No. 1345 F Street, N. W., Washington, D. C. November 24, 1888.

Massage for Constipation.

Mr. Editor,—Having been a great sufferer for the last twelve years from constipation, and after consulting many eminent physicians, and taking all medicines known and recommended for such troubles, I began to despair of ever being relieved.

During the last session of the Medical Society of Virginia, held in Norfolk, I had a talk with Dr. I. S. Stone, of Lincoln, and he thought massage would be of more benefit than anything else. I told him I had tried massage, and found no relief, although it was never satisfactorily done. He said that if by any means it could be properly done, he thought it would effect a cure. I ordered an iron ball, weighing $5\frac{1}{2}$ pounds, made hollow; $4\frac{1}{2}$ inches in diameter, and turned perfectly smooth with a polished surface. Twice

a day being stripped, laying a towel over the abdomen, I would roll the ball over the bowels for ten minutes. After the first day the bowels moved, and up to the present time have acted regularly, and every symptom of constipation has disappeared.

I do not claim any originality for this method of massage, for it seems to me I have seen it, or heard it recommended, although where, and by whom, I cannot recall; and simply report my experience in the hope that it may be the means of relieving some sufferer from the terrible affliction of constipation.

Yours respectfully, W. D. Turner, M. D.

Fergusson's Wharf, Va., November 24, 1888.

"Atypical Forms of Typhoid Fever."

Mr. Editor: Being prevented by ill health from attending the session of our Society in Norfolk, I have read with much interest your partial report in the Virginia Medical Monthly, November number, 1888, in this regard. The discussion of atypical cases of typhoid fever upon the whole was of much interest and profit as well, for nothing serves so much to elucidate and fasten upon the minds of practitioners important items in their line as full and free discussion. Not intending to disparage any engaged in this "family talk," I do verily believe Dr. J. H. Claiborne spoke the sentiments of a majority of the country practitioners of our State. If he did not, in my humble opinion, he holds a position as expressed in his remarks well nigh impregnable in a strictly practical point of view. All of our old doctors will tell you they have "fought the good fight," and some of them "finished their course," against these same so-called atypical typhoid fevers years ago, under the name of inflammatory bilious fevers, sometimes called slow fevers (in the country). If a "rose smells as sweet by any other name," it follows that it must still possess the attributes of odor unalterable by the misnomer. So they may be called by any name, yet our old gentleman of the profession will "track them and

tree them." All old fellows who have galled in the harness and wear the marks of the saddle know full well how insidious are these diseases under the head of "passive," "slow," etc. They will sometimes "take the back track" in the same footsteps by which they advanced, and cool the ardor of the doctor for his profession from a hopeful condition down to disgust. The enteric fever of Wood is rare in the country of this section of the State; and the so-called typho-malarial or atypical seems to claim authority. I notice one thing in the treatment of this disease. Whilst the name differs of late, the most successful management consists in the old line of procedure.

WM. S. STOAKLEY, M. D.

Bay View, Va., Nov. 26, 1888.

Original Translations.

From the French. By R. M. SLAUGHTER, M. D., Theological Seminary, Va.

Treatment of Eczema of the Face in Children.

Dr. Besuier, physician to the hospital at St. Louis, lays down the following precepts (Journal de Méd. et de Chir.

Prat.) for the treatment of the eczema of children:

There are three forms of the facial eczema of children. The first is found in lymphatic or scrofulo-tuberculous subjects. Its principal characteristics are that there is but little itching it tends to develope around the nose and mouth, and gives rise to great enlargement of the lymphatic glands, which may become points of departure of tuberculous lesions. The secretions from it are very abundant, and there is often phlyctenular keratitis present.

The second form appears in the first period of childhood, and coincides with dentition. This form itches very much and covers the face like a mask, respecting the orifices, the nose, mouth, eyes and the folds of the ears. It also often attacks the backs of the hands and wrists. At the same time there exist symptoms of buccal irritation, such as sensibility of the gums and abundant salivation, indicating a reflex eczema. The best means of treating it is to lessen the irritation of the gums by making them chew the root of the marsh-mallow or liquorice, and specially by quieting

the gingival pruritus by frequent applications of the following mixture:

Ry.—Glycerine.

Distilled water.......āā 3ij. ss. Potassium bromide grs. xv

Cocaine muriate...... grs. iss.—Mix. If the sleep is disturbed give four teaspoonfuls (at intervals

of an hour between each) daily of this mixture.

R.—Potassium bromide grs. xv Syrup orange flowers 3x.—Mix.

For the local treatment use the following ointment:

The third form differs from the preceding in the absence of pruritus, while it, too, does not appear about the orifices. It has its seat in that part of the skin which surrounds the sebaceous and sudoriparous glands. It begins in the scalp and is characterized by abundant desquamation and the appearance of the hair, which is thin. It extends to the eyebrows, the face, and often the neck and shoulders. The treatment is simple. The hair should be cut and the scalp washed with soap. The face should be washed with warm water, to which has been added a little milk to better dissolve the greasy secretions. This should be followed by applications of resorcine.

The resorcine may be replaced with from 60 to 80 grains of sulphur, (or better, with from 3 to 6 drachms of ichthyol,

R. M.S).

For the scrofulo-tuberculous form, which is the most serious of all, treatment should be commenced by bathing the parts twice daily with a warm wash composed of a table-spoonful of Van Sweiten's solution to a basin of water, and gradually increasing the strength until the pure solution is used. At the same time applications should be made of an ointment composed of calomel—1 part to 30 of the excipient. Next recourse must be had to the use of an ointment of red precipitate of the strength of one grain to \mathfrak{F}_j ss. These preparations are irritating and must be carefully watched. (La Tribune Méd., Oct. 7, 1888).

Antipyrine by Subcutaneous Injection.

Dr. A. Wolff (*Therapeutische Monatschefte*, Bull. de. The advises, after a great number of experiments, the use of antipyrine hypodermically in the following diseases:

1. In the divers forms of muscular rheumatism.

2. For the stitches in the side of phthisical patients.

3. In all neuralgias of superficial nerves.

- 4. In surgical and other affections in which, by reason of very acute pain, it is difficult to establish a precise diagnosis.
 - 5. In attacks of asthma.

6. In all diseases accompanied with pain for which mor-

phia would be prescribed.

In every case where a localized superficial pain is to be rapidly relieved, antipyrine hypodermically is to be used in preference to any other remedy. Its sedative action is always manifested with great rapidity—at the latest, in five minutes. It disappears only after ten or twelve hours, and even then the pains do not return with their former intensity. The author has not observed any after-effects follow the injections, such as erythema, abscesses, etc. The only inconvenience of the injection is a severe pain which lasts about a minute. This inconvenience might perhaps be obviated by adding a little cocaine to the solution. The pain, however, is never so great that patients refuse another injection. (Le Praticien, Nov. 5, 1888.)

Treatment of Lupus.

Unna (Monatschrift fur Dermat.) advises the making of punctures into the seat of the lupus with ordinary wooden tooth-picks, the ends of which have been well sharpened, and wrapped with a little cotton and dipped into the antituberculous solution of which this is the formula:

At each sitting, operate upon a dozen of the little centres, discrete nodosities, or salient points of diffuse infiltration, beginning at the edges. Begin by making a slight incision, one-eighteenth of an inch deep, into each point. After a drop of blood appears, make the puncture, which should be the depth of from one-eighth to one-fifth of an inch. At each puncture the tooth-pick should be left in place ten or fifteen minutes, and when it is supposed that the tissues are impregnated sufficiently with the solution, the picks may be removed by a spiral motion the reverse of that introducing them. At the end of two or three days no trace remains of the punctures and of the centres operated upon, and another sitting should be had. (Le Praticien, Nov. 5, 1888.)

Treatment of Abnormal Epidermic Excrescences.

Dr. Roesen (Munich Medic. Woch. and Paris Med.) felicitates himself upon the success of the following treatment for corns, soft corns, warts, etc. He first moistens the skin with a solution of boric or salicylic acid, and covers with a layer of pure crystallized salicylic acid one-tenth to one-eighth of an inch thick. Over this he places a layer of borated lint, moistened and folded in four layers, and over this a piece of rubber large enough to envelop well the part and dressing. If the growth is not very large, the dressing is left on four or five days. When it is removed, the growth will be found to be shrivelled and detached from its point of implantation. Beneath, the skin presents no sign of cauterization or hæmorrhage. When the growth is thick, as is often the case with corns, the dressing should remain on longer or be renewed after five days. (Le Praticien, Oct. 15, 1888.)

Treatment of Pneumonia with Large Doses of Digitalis.

Dr. Petresco, of Bucharest, in a communication to the Academy of Medicine of Paris, states that during the last five years he has treated in the military hospitals at Bucharest more than 600 cases of pneumonia, the ages of the patients being from 21 to 25 years. From his experience he gives the following conclusions:

1. Pneumonia may be cut short in the beginning by the

administration of large doses of digitalis.

2. This abortive treatment is the most rational one, being based upon the pathogenic indication.

3. Its efficacy is confirmed by given statistics, the mortal-

ity being very much reduced.

The amount of the drug given daily was one to two drachms of digitalis leaves in infusion. This amount constitutes the true therapeutic dose for the pneumonia of adults. This dose is entirely tolerable and non-toxic.— (Journal d'Hygiene, October 18, 1888.)

Proceedings of Societies, Boards, etq.

MEDICAL EXAMINING BOARD OF VIRGINIA.

The Medical Examining Board of Virginia, recently elected by the Medical Society of Virginia, and commissioned in due form by the Governor for the new term of four years, to begin January 1st, 1889, held a meeting for organization, under call by the Secretary of the Commonwealth of Virginia, in the Capitol Building, Richmond, Va., November

20th, 1888.

The following members-elect, representing the regular profession of the State, were present: Drs. S. W. Carmichael, of Fredericksburg (1st Congressional District). Herbert M. Nash, of Norfolk (2nd District), R. A. Lewis, C. R. Cullen and Hugh M. Taylor, all of Richmond (3rd District). Wm. J. Harris, of Blackstone, Hugh Stockdell, of Petersberg (4th District), J. H. Neff, of Harrisonburg, Hugh T. Nelson, of Charlottsville (7th District), C. C. Conway, of Rapidan, Alexander Harris, of Jeffersonton, Bedford Brown, of Alexandria (8th District), Z. J. Walker, of Brownsburg, H. M. Patterson, of Staunton (10th District), and Thomas J. Moore, of Richmond—one of the two Examiners from the State at-Large—(15 of 32 commissioned); and the following three of the five members of the homeopathic school of practice were also in attendance:—Drs. George A. Taber, of Richmond, W. P. Jones, of Petersburg, and F. Webster, of Norfolk—a grand total of 18 out of a possible 35, as two of those recently commissioned to represent the regular profession have declined to qualify, and have resigned their commissions.

On motion, Dr. Bedford Brown was called to the chair

and Dr. J. H. Neff was appointed Secretary.

On further motion, balloting for the permanent officers of the Board without nominations was ordered. On the first ballot, Dr. H. Grey Latham, of Lynchburg (6th District), was re-elected President; but it was subsequently ascertained that he would not serve in office another term. Dr. Hugh T. Nelson, of Charlottesville (formerly Secretary of the Board), was elected President. Afterwards Dr. C. C. Conway, of Rapidan, was elected Vice-President, and Dr. Hugh M. Taylor, of Richmond, was elected Secretary and Treasurer.

On motion by Dr. R. A. Lewis, the By-laws of the Old

Board were adopted by the new.

Dr. Lewis asked if after a committee of a section had graded a candidate's papers, could the officers of the Board or the Board itself change the grade? The chair ruled that the By-laws on this point are emphatic.

In response to an inquiry the chair ruled that in special examinations, the applicant shall be examined by a com-

mittee of three in session.

On motion the Board adjourned subject to the call of the President.

Analyses, Selections, etc.

Buffalo Lithia Water a Solvent for Uric Acid Calculi.

The clinical evidences of the solvent action of Buffalo Lithia Water in cases of uric acid formations are becoming so convincing that we deem it of importance to the profession to keep them reminded of this virtue of this water until it becomes generally recognized and appreciated. To the numerous other cases which have been reported from time to time in the journals, etc., we now add another, which we find reported in the Maryland Medical Journal for November 17th, 1888, by Dr. E. C. Laird, of Haw River, N. C., and Dr. Fred. S. Whaley, Resident Physician at Buffalo Lithia

Springs.

Statement of Dr. Laird. The relief afforded by Buffalo Lithia Water to a patient of mine, Col. H., of this place, a sufferer from renal calculi, is, I think, worthy of some record. The first of May last he came under my care subject to frequent attacks of nephritic colic. Except as to the usual treatment for the relief of present suffering, I put him exclusively upon Buffalo Lithia Water, Spring No. 2, under the influence of which he in a few weeks passed four calculi weighing from two to three grains each, which was followed by a disappearance of symptoms. Notwithstanding, however, the continued use of the water, after a short interval, there was a return of these attacks with increase both of frequency and severity, when he made a visit to the Buffalo Lithia Springs where he used the water six weeks with the following results: Ten days after arrival he began to discharge at intervals, large quantities of calculi and sand, which continued for several weeks afterwards, gradually diminished until at the expiration of the six weeks there was only occasionally, and barely perceptibly upon minute examination a slight sandy deposit in the urine. At the same time improvement in the general condition of the patient was very marked.

The amount of calculous matter discharged may safely be estimated at from one to one and a half ounces. Under microscopic examination it was evident, I think, that the calculi were originally parts of larger formations dissolved by the action of the water. Analysis made by Dr. F. S. Whaley, Resident Physician at the Springs and consulting

physician in the case, showed it to be uric acid.

Six weeks have elapsed since he left the Springs. Use of

the water continued. The urine is free from sediment and is normal.

It is proper for me to add that I was in constant attendance

upon Col. H. during his stay at the Springs.

Statement of Dr. Whaley, Resident Physician. Dr. E. C. Laird brought to me for analysis in June last three calculi which he informed me had been passed by Col. H., of Haw River, N. C. They were egg-shaped, hard, brown and weighed respectively two, two and a half, and three-fourths grains. All of them showed marked facets. Analysis proved these to be uric acid. The formation was in consecutive layers and I made three analyses for one—one from the outer layer, one from the middle and the other from the nucleus. All of these analyses proved a uric acid calculus. My examinations were both chemical and microscopical.

After this the patient came to the Buffalo Lithia Springs, where as resident physician, I was called in and saw him daily for about four weeks. He suffered from frequent attacks of nephritic colic and passed at intervals large quantities of uric acid calculi and uric acid sand under the use of Spring No. 2. The particles passed were irregular and so soft that they could be mashed between the fingers. The sand and fine particles under the microscope looked broken,

porous and presented a worm-eaten appearance.

I believe from this and similar cases which have come under my observation, that the Buffalo Lithia Water possesses solvent power over uric acid calculi. My belief is based on the following observations: 1. That the calculi passed under the use of this water are softened so that they crumble easily. 2. The crystals under the microscope (which are passed under the use of water) are not so well defined and present a worn appearance, and the edges are not so sharp. 3. That patients with attacks of nephritic colic, under the use of this water, pass uric acid sand and the attacks are relieved.

Laparotomy for Intestinal Obstruction.

Dr. Joe Howell Way, of Waynesville, N. C., reports the case (N. C. Med. Jour., Nov. 1888,) of a farmer, aged 31, who, after lifting a heavy bag of grain on his horse, developed symptoms of intestinal injury in an hour or so afterwards, such as "sick at his stomach," increasing uneasiness in his bowels, then a chill, well-developed abdominal pain and vomiting bilious matter. The pain became intensely acute an hour or so later, and ranged from the umbilicus down to

the right inguinal region. He was given morphine to relieve the pain, rhubarb, calomel, compound cathartic pills and two ounces of castor oil, besides several enemata. At first, a small amount of fecal matter was passed, but later the fluid returned untinged, and, like the cathartics, the enemata were of no avail. Next morning the pain was worse, abdomen was tympanitic, fecal vomiting occurred, but no movements from his bowel. A slight swelling was noticed in the right inguinal region, extending down over the spermatic cord into the scrotum, just above the testicle. Taxis did not entirely remove this swelling. Morphine, the cathartics above named, besides sulphate of magnesia, were given throughout that day, but the patient grew worse. That night fecal exhalations from the patient's breath filled the room with fecal odor. Tongue was heavily coated, red at the tips and edges, and very tremulous when protruded. He was very thirsty all the time and drank freely of water. Pulse 130, small and weak. Respiration quick and shallow. Inspirations caused even more acute abdominal pain. Hiccough developed. Abdomen was greatly distended and tender all over-especially two inches above the right internal abdominal ring. A slight swelling ran down from the external abdominal ring to a short distance above the right testicle, which swelling also was tender, and gave a doughy sensation to the fingers. No cough impulse was perceptible. Half grain of morphine was given hypodermatically and repeated twice at half-hour intervals. Several hours later, the pain was much less, but the general symptoms indicated the beginning of a collapse. Exploratory incision was made over the site of the abdominal rings along the inguinal canal. On opening the peritoneum about half ounce of dark grumous fluid, with an offensive odor, ran out. A fold of omentum—dark purple, and emitting an offensive odor—protruded from the external ring. This omentum was pulled down until healthy tissue was reached; a ligature was thrown around this diseased portion and removed en masse. A small loop of intestine which had come through the internal ring, but not the external, would not return into the abdomen. This loop was intensely congested, but finding no cause of constriction at the internal ring, it was evident the source of constriction was higher up. Accordingly, the incision was continued upward until the point of intensest pain, as complained of by the patient, was reached. The index finger, then inserted into the abdominal cavity, felt a ligamentous band under which

the intestine seemed to have passed and yet unable to return. This band was divided partly with a probe-pointed knife and partly by tearing it with the finger, and the intestine was released. Antiseptic dressings, patient reacted finely, and the bowels moved freely in an hour. About 20 watery feculent discharges took place in the next four hours, when morphia was given hypodermically to restrain them. On the eighth day the stitches were removed. The patient's recovery was rapid. Drs. Wells and Webb assisted in the operation.

Intestinal Troubles of Infancy

Is the title of a good paper by Dr. L. G. Broughton, of

Reidsville, N. C., (N. C. Med. Jour., Nov. 1888).

Under the head of "summer complaint," some authors describe ileo-colitis, entero-colitis, intestinal catarrh which do not differ from dysentery in the adult, and are to be treated upon the same principles as in the adult. As to wellrecognized cholera-infantum, having become disgusted with the old plan of treatment, during the past summer, he decided to try antiseptics and germicides. Undoubtedly, in his opinion, a specific microbe is generated within the gastrointestinal tract as a result of decomposition and putrefaction of some of the food taken. In the beginning of all these cases, we will find indigestion and quantities of undigested matter pass from the stomach and bowels as the result, and a diarrhea is set up which soon develops into easily recognized "cholera-infantum." The brain symptoms are only "an intoxication of the blood." He thinks, for practical purposes, that we should classify infantile diarrhoa into one or the other of the three grand divisions:-simple diarrhea. cholera-infantum or dysentery. The indications for treating cholera-infantum are, (1) clean out the bowels with castor oil, if the stomach will retain it, or copious enemata of milk warm (antiseptic) water; (2) arrest decomposition and putrefaction by some antiseptic and germicide, such as salicylate of soda, in connection with Parke, Davis & Co.'s pepsin—2 or 3 grains every two or three hours in a child 2 or 3 years old; naphthalin, salol, etc., have their advocates; but onesixth to two grains of sulpho-carbolate of zinc, with the pepsin just referred to, every two or three hours in a child from six months to two years old seems to be almost a specific; (3) restore healthy action in the alimentary canal, by ferruginous and bitter tonics; and (4) treat consecutive lesions as they arise.

Incidentally, Dr. Broughton confirms (by a record of three cases), the advice of Dr. Waugh as to the value of sulphocarbolate of zinc as an antiseptic and germicide in the successful treatment of typhoid fever.

Is the Frequent Use of Forceps Abusive?

In the abstract of a paper by Dr. Thomas Opie, of Baltimore, (N. C. Med. Jour., Nov. 1888), the statement is made that there is a remarkable unanimity of opinion in the teaching of text-books, medical journals and medical societies, favoring the more frequent use of forceps, and condemning the so-called expectant management of labor. The axiom, "meddlesome midwifery," has beaten a retreat before the clamor for the forceps. But Dr. Opie re-asserts that to substitute art for nature's peculiar and inimitable methods is always dangerous. The most unanswerable argument against frequent use of the forceps comes from the gynæcologists. There is but little need for straight (Chamberlyn's) forceps. The traction-rod (Tarnier's) forceps alone are sufficient, at and above the superior straight. They supplement—do not supersede—nature in her efforts. Dr. Opie pleads for their judicious use. But one of the most important requisites for a good obstetrician is to "know how to wait and do nothing." In the first stage, especially in primiparæ, he must wait a long time before applying forceps even until the mother or the child is in jeopardy. The most frequent use for forceps is in the second stage. Anesthesia is the best treatment for excessive nervousness. As to the real frequency of need of the aid of forceps, Dr. Opie thinks it is about 1 in 15 or 16 cases of labor.

[Note by Editor.—The advice given by Dr. Opie is so excellent that we would be glad for those beginning practice to adopt it. During the first ten years of our professional life, we oftentimes used forceps to expedite labor, and for trivial causes. During the past ten years, we have been much more conservative, and have had far better after effects. Let there be a distinct demand for forceps before using

them.]

Fever and Antipyretics.

Dr. F. W. McRae of Atlanta, Ga., thinks (Atlanta Med. and Surg. Jour., Nov., 1888,) that the pathological visceral changes in continued fevers are due, in much greater degree, to infection than to increased temperature, though the combined influence of the two is much greater than either alone.

In these fevers, we have grave pathological changes which seriously affect the issue. So that whatever the cause of the fever, there is still increased chemical activity of the constituent elements of the body and augmented muscular friction produced by the pyrogenic substances. The liver is about the first organ whose functions are interfered with: hence the "biliousness" and impaired digestion. Palpable cellular changes occur early, which soon terminate in extensive parenchymatous degeneration. The healthy liver stands guard over the portal circulation to prevent the entrance of deleterious substances from the alimentary canal into the general circulation. But if diseased, the irritating products of imperfect digestion and effete matters from the alimentary canal enter the circulation, increase the chemicophysiological processes and consequently the production of heat. This effete matter must be eliminated chiefly by the kidneys and skin. Hence inactivity of either or both of these emunctories jeopardize the integrity of the heart, lungs, spleen and other viscera, and ultimately every tissue of the body. The poison, acting through blood, is, therefore, the probable cause of the increased temperature, and not the effect. Heat is eliminated from the system by the skin (about 80 per cent.) and the lungs (about 20 per cent.).

Conservative antipyretic treatment, therefore, should aim (1,) to diminish heat production, and (2,) to increase heat dissipation. Now do the so-called antipyretics, such as antifebrin, antipyrin, thallin, etc., do these things safely? In many cases, no. For these very antipyretics, in full doses, produce marked intersticial changes in the kidneys, if not in other organs; the urine diminishes in quantity; its specific gravity and the urates are increased, and it presents a smoky appearance and frequently contains casts. tipyretics also most probably produce marked blood changes, for the red corpuscles are lessened in number, and the oxyhæmoglobin is converted into methæmoglobin. New York, even asserts that deaths with excessively high temperatures are more frequent now than before the introduction of this class of remedies. Their use, he thinks, causes a retention of the excrementitious substances, thus augmenting the chemico-physiological processes, and ultimately increasing the body temperature instead of diminishing it. It is a fact that their use has not diminished the death rate in typhoid fever, nor shortened the duration of the disease.

As to cold baths, there are five contra-indications to their

use: 1, The shock they produce; 2, The reactionary effect increases the production of heat; 3, They contract the capillaries, and thus diminish natural heat dissipation and the elimination of effete material by the skin; 4, They cause passive congestion of the viscera, and predispose to stasis and to hemorrhages; 5, They cause wear and tear when it is essential to harbor every particle of vitality.

A prime objection to the use of either the antipyretics or the cold bath is the increased danger of heart failure—the

thing above all others we should seek to obviate.

As for himself, he believes the indications are best fulfilled by the use of diuretics, diaphoretics, intestinal antiferments, and alcohol. Diaphoretics increase heat dissipation and cutaneous elimination. Refrigerant diuretics eliminate the products of nitrogenous metabeolism and imperfect oxidation. Antizymotics prevent intestinal fermentation. Alcohol—by far the most important of internal remedies stimulates digestion, is rapidly absorbed from the stomach, is taken up by the tissues, and presents itself a vicarious offering for oxidation in lieu of the tissues; and in its oxidation water is produced. It strengthens the heart's action, and it dilates the cutaneous capillaries, thus reducing fever by radiation. Tepid baths are invaluable adjuvants—softening and cleansing the skin, increasing both sensible and insensible perspiration, allaying nervous irritability and relieving visceral congestion.

Plea for Early Recognition of the Conditions Requiring the Use

of Eye-Glasses.

Dr. W. H. Way, of Atlanta, Ga., writes on this subject (Atlanta Med. and Surg. Jour., Nov., 1888,). He divides the numerous class of persons who demand the use of eve-glasses into three groups: (1,) The largest group consists of hypermetropes—due to constant strain upon the ciliary muscles to produce such a curvature of the lens as will enable them to see all objects distinctly. This brings about reflex neuroses and symptoms (asthenopia) such as headache, pain or burning in the eyes, blurred vision, etc. Among the objective symptoms are photophobia, lachrymation, conjunctivitis, blepharitis, hordeoma, etc. (2,) Myopes are liable to more serious consequences in the higher degrees if they go uncorrected. The children cannot see the figures on the blackboard at school; they are usually quiet, and spend most of their time indoors, reading, looking at pictures, etc., simply because they see so poorly in the distance that they become timid, and will not romp like other children. As they grow up and become "the well read" maidens and young men, they complain that they cannot recognize their friends on the street, etc. This condition is sometimes inherited or congenital, but very often is acquired; and in the higher degrees is progressive. It is a prolific source of hyalitis, choroiditis, and detachment of the retina. Here, then, this error of refraction should be corrected at the earliest practicable moment by glasses. The next group (3,) consist of those past 40 years of age. They cannot produce a certain curvature of the lens owing to its increased density. This "far sightedness" of advancing age compels the use of glasses in order to read, to thread a needle, etc. The lesson intended to be taught by this paper seems to be to urge physicians to send their patients to the ophthalmologist as soon as possible.

Nasal Catarrh.

Dr. A. B. Thrasher, of Cincinnati, advocates (Atlanta Med. and Surg. Jour., Nov., 1888,) the surgical treatment of nasal catarrh. For simple enlargement of the turbinated body, he uses the cold snare, or the Woakes' gouge or plow, while the parts are cocained; yet a large, broad scar generally results. Even better than a snare is a No. 8 piano wire; but in removing fibroids be careful not to draw on the wire so as to excise too rapidly, lest decided hemorrhage results. In uncomplicated hypertrophic rhinitis, he anæsthetizes with cocaine, introduces the galvano-cautery knife to the posterior part of the hypertrophy, turns the sharp edge towards the tissue to be cut, heats the knife white hot and cuts deeply, drawing the knife forward through the hypertrophic tissue.

Principles of Education, and their Application to the Development of Medical Science.

Dr. Joseph Jones, Professor of Chemistry and Clinical Medicine in the Medical Department of Tulane University of Louisiana, New Orleans, after a full discussion (of 114 printed pages), of the subject in his Address as President of the Louisiana State Medical Society last April, and just published, arrives at the following conclusions:

1. Students should be thoroughly prepared and equipped for the study of medicine by a systematic and philosophic preliminary course of study of the fundamental branches

of science.

2. A thorough course of medical instruction should embrace not less than fifteen chairs or departments, with the necessary number of professors and instructors, furnished with all the necessary instruments, re-agents, agents, and well-constructed and thoroughly equipped chemical, anatomical, physiological, therapeutical and pathological laboratories.

3. Medical students should be taught by actual experiments and demonstrations in chemistry, physics, physiology,

pathology and therapeutics.

4. Students should be prepared by their course of study, not only for the practice, but also for the development and advancement of medical science.

5. The course of medical studies should be graded, and should embrace for their completion not less than four

years.

6. Clinical instruction is essential to the perfection and advancement of medical knowledge with the student of medicine, and should be prosecuted from the inception to the end of the medical course of study.

Epistaxis Controlled by Compression of Superior Coronary Artery.

Dr. B. Frank Humphreys, of Hawkins, Tex., reports (South. Med. Record, Nov. 1888), the case of a man whose superior coronary artery of the right side was divided by a revolving saw and whose nose was also bleeding from the same injury, and had been bleeding for three hours. Besides stopping the hemorrhage from the wound of the artery he also immediately stopped the epistaxis by applying a compress (made of the cork to a quinine bottle), over the superior coronary artery—holding the compress firmly pressed in place by a bandage passed around the head and the upper lip.

Empyema--Its Evacuation Causing Dropsy, Etc.

Dr. C. A. Brooks, of Americus, Ga., reports the case of a boy (Atlanta Med. and Surg. Jour., Nov. 1888), 8 years old, who had empyema as a result of a fall on his left side. Aspiration evacuated 6½ ounces of pus. He improved rapidly for a time under Fellows' syrup of hypophosphites compound and other tonics. But later, pus accumulated in the upper and anterior portion of the chest, and "pointed" between the fourth and fifth ribs. This was opened under antiseptics. But immediately upon the discharge of the pus from

the upper anterior pleural cavity, general dropsy set in. He was given turirate of iron and potash, syrup of squills, duid extract of jaborandi, tincture of digitalis and shorry wine, and in about ten days this condition yielded kindly. He rapidly recovered, with but slight retraction of the classwalls. The points of special interest in this case are: (1) I we separate or distinct abscesses, probably due to alhesian of the pleura covering the lung to the chest-wall in the region of the primary circumscribed acute inflammation. (2) A single evacuation of pus resulted in cure. (3) General dropsy following the evacuation of pus around the heart—due to the sudden removal of the pressure which doubtless mused a certain amount of dilatation of that organ.

Vesico-Vaginal Fistula, with Everted Bladder in Vagina, and Four and One-Half Months Conception, Etc.

Dr. K. P. Moore reported to the Macon, Ga., Medical Siciety (South Med. Rec. Nov. 1888), the case of Mrs. A., aged about 4). She had a ves co-vaginal fistula cutirs v across the superior vaginal wall—the opening into the bladder being large enough to easily pass a large turkey egg. The rent had existed over six months. The vaginal walls had become indunited, and so much retructed as to allow fully two-thirds or more of the bladder to become everted and protrude into the vagina, forming a large, scarlet, granulating mass, which bled and gave exemiciating pain on the slightest manipulation. All of this condition was the result. of a labor to July, 1887. On further examination, the evryix uteri did not protrude into the vagina; it was a mere depression in the superior vaginal wall, about an inch behind the fistola. Hemorkable as it may seem, she was again pregnant (April, 1888), some four and one-half months. Induction of abortion being advised after a thorough emanination and our sultation with able friends, a pterine so in I was introduced into the womb some six inches and freely swept around. This apparently failing to bring on pains, after waiting several days the usual operation was performed for the repair of the vesico-vaginal fistula. During the operation bichloride of mercury solution (from Figth to Figth) was used as the antiser to wash. Several times during the operation, under ether, which required about two hours, the heart failed, but its action was each time restored by hypodermics of whiskey and morphia. All seemed to be going on well, until on the tenth day after the operation, when, on removing the stitches, it was noticed that there had been but

little union of the wound. Tonks were given, etc. Everything was being erratged for another or ration. On the 19th day after this first operation, she had an election of a factus nearly five months old. She bled profitsly, and came near dying. With Loomis' foreps, the placeta was usely delivered, and she rallied. A month had, after the general health was restored, a second operation was performed for the cure of vesico-vagual fiscals. She was given a half grain of morphia hypodermically and two curses of whiskey, but no other an exhetic and Simons' operation for vesico-vaginal fistals performed. The satures (20 in number, were removed on the two lith day after the operation and all was well. She is now well, and helps her bushed were in the garden.

The Cause of Yellow Fever.

Dr. J. C. Le Hardy, of Savanush, h. war modernt exchange, the Atlanta Medical and 8 med Learning for December, after giving the history of the discussion in the that yellow fever belongs essentially to the Atlanta and Gulf coasts, and that for more than two centuries it has never been spolemic in any single year over any great extent of that coast; (2) that an epidemie may extend throughout the valley of a river; or (3) that it may be restricted to a portion of that valley; or (4) that it may confine itself to a locality. The season before an endemn of years from is a "poculiar" one-the ruinfull has been excessive and the solar heat oppressive. An epidemie, therefore, rarely begins before August and as rurely lists, as such, after November. Asiatic cholors follows the line of travel, whether among the mountains or valleys. See the it is commanded in a individual to individual, which ter it may originate. The differences are: (1) I'm for follows inhalations of the germs (spores) of a plant which float in the air of an infected place. This plant is known only by it habits, and fructifies abundantly on rule: ; the Atlantic and Gulf coasts and the valleys of the inflawing rivers because these places. only furnish the essential soil, moisture and heat; but the combitions of earth and air required for the growth of the plant never cour at the same time along any extensive coast line, although they do some times exist along every part of a river valley. (2) Choice is produced by the drinking of water in which the germs of the producing plant are in active existence. (3) The germs of maliper emanate from an individual having the disease, and therefore is called contagious, while yellow fever and cholera are known as infections

From these premises, Dr. Le Hardy thinks that the only conditions which should cause a reasonable fear of an outbreak of yellow fever in his section are: (1) The location of the town on the coasts or in the valleys of rivers debouching thereon. (2) Bad drainage of the place and its environs, following a long continued hot spell and heavy rainfalls in the early summer; or (3) the coming in of a ship from an infected port or closed car, a trunk, etc.,—the preceding conditions being present, but not otherwise. These conditions being wanting, the germs or spores of the vellow fever plant can never produce an epidemic of the disease. But wherever the epidemic conditions of the earth and air is general, all efforts to stamp out the disease have always proved utterly futile. The Doctor very forcibly argues by facts and suggestion that, with the existence of the favorable conditions for the origination of yellow fever in any place, quarantine does not protect against the outbreak of epidemic. Quarantine only protects those places where the spores or germs of the disease have never hibernated in the soil, and yet with the pre-existing condition of moisture and heat.

Chloroform Suggested for Cerebro-Spinal Meningitis.

Dr. C. H. Harris, of Cedartown, Ga., reports (Atlanta Med. and Surg. Jour., Dec., 1888), the recent case of a boy 7 years old, taken with a light convulsion, followed by a severe headache and a strange affection of the eves—drawn downward so as to hide both corners behind the lower lids. There was a slight stiffness of the dorsal muscles, but no fever, and respiration and pulse normal; mind clear. In a few minutes, however, after the Doctor's arrival, he had "a spell" which was so queer that he thought the sexual organs involved as a cause. Suspecting masturbation as a factor, in the height of the paroxysm, he suddenly threw off the cover, when he was surprised to find the boy's penis, of a size suited to one twice his senior, intensely erected, and his frame trembling as if thrilled by an orgasm. The penis terminated in a long and sharply phymosed prepuce which stretched tightly over the glans. There was also a luxurious growth of hair an inch long about the pubes, and the remainig sexual apparatus gave evidence of remarkable precocity. Believing that the profound nervous disturbances were the result of the congenital phymosis and adhesions, and the deprayed sexual habits and that circumcision would

cure him, (and this view being sustained by two experienced brother practitioners), no time was lost in chloroforming the patient and circumcising him. As soon as he came under the full anæsthetic effect of the chloroform, every nervous symptom disappeared as if by magic. The wound was almost healed in five days, when suddenly wild delirium, flaming eyes—more intensely drawn than ever—extreme opisthotonos, labored breathing, elbows drawn back, with clinched hands, high and varying temperature, rapid and irregular pulse—in a word, all the symptoms of cerebrospinal meningitis were developed. Coma soon followed the delirium which rapidly deepened and ended in death. In this short time, destructive inflammation of one eye had taken place, and had resulted in perforation of the cornea and shrinking of the ball. In reviewing this record, the Doctor thinks it was a case of meningitis from the beginning, and that for the five days after circumcision it was in mask. He believes that the anæsthetic use of the chloroform for the operation arrested the progress of the disease; and thinks that had he diagnosed the true character of the disease at first as cerebro spinal meningitis, and repeated the chloroform inhalations to deep narcosis daily, the result would have been different.

Internal Urethrotomy, Reports of Cases.

Dr. W. S. Elkin, of Atlanta, Ga., reports (Atlanta Med. and Surg. Jour., Dec. 1888), 23 cases in his experience. In all of them, the meatus was smaller than the normal calibre of the urethra, and was divided with a straight, blunt pointed bistoury before the operations for the divison of the strictures were begun. Otis' dilating urethrotome was used in dividing the stricture in the pendulous portion of the canal. Two of the cases reported undoubtedly are illustrations of strictures resulting from masturbation; 7 the result of traumatic injuries, and the remaining 14 were the results of previous attacks of gonorrhea. In all the cases where there was much (gleety?) discharge the downward curvature of the penis was most marked, and required a much longer time for the relief of this deformity after the urethrotomies. But if the strictures are attended with much discharge, this should always be reduced as much as possible before the operation, or else the cuts become inflamed and recovery is not so rapid. Division of strictures confined in the pendulous portion of the urethra is a comparatively safe operation,

and altogether satisfactory if properly performed. But strictures in the membranous portion should be gradually dilated, and if this is not possible, then they should be divided by means of external urethrotomy. The Doctor does not believe that strictures in the pendulous portion of the canal can be radically cured by a gradual dilatation, although we are often compelled to resort to this means alone since many patients will not submit to a cutting operation.

Painless Extraction of Teeth.

Throughout many of our cities and counties are itinerating and localized dentists who are extracting teeth with the production of very little pain, after the application of a wash to the gums. They are trying to conceal from the profession and the public the composition of this wash. Precisely who formulated the prescription originally we do not know, but Dr. S. T. Lowry mentions it in the Transactions of the Texas Medical Association for the session held in Galveston in 1887. Dr. J. M. Lewis, of Mexia, Texas, reproduces it in Daniel's Medical Journal for October, 1888. He states that it is the formula used by the "long-haired Indian doctor" whose face and voice are familiar on the streets of our towns. After having injected the gum or rubbed it with the mixture, the "doctor" assures his patient that "it won't hurt;" that "there is no danger," etc., and then dexterously extracts the tooth, and really there is very little, if any, pain attending the extraction. It is true alveolar abscesses sometimes follow; but Dr. Lewis thinks they are due to using needles not properly cleaned, or to too large doses of the mixture. The following is the formula:

A Successful Case of Ovariatomy

Is reported by Dr. George S. Lloyd, of Tarboro, N. C., (N. C. Med. Jour., Nov., 1888). The tumor was over seven years in developing so as to give her the appearance of being full term with child. She had emaciated greatly. The tumor without fluid weighed $3\frac{1}{2}$ pounds. Operation was done under antiseptics. She weighed about 70 pounds just after the operation; she now weighs about 125.

Book Notices.

Clinical Lectures on Certain Diseases of the Nervous System.

By Prof. J. M. CHARCOT, Professor to the Faculty of Medicine, Paris, etc.

Translated by E. P. HURD, M. D., Newburyport, Mass. 1888. George S.

Davis, Detroit, Mich. 12mo. Pp. 155. Paper. Price 25 cents. (From Publisher).

"The Physians' Leisure Library" has comprised in its regular monthly issues some very excellent books. The one now before us illustrates the truth of this statement. It is true the title as given above, gives an uncertain idea as to what the famous French author is treating of. A better title would have been Hysteria in the Male and Allied Troubles of the Nervous System. The title we have thus framed would suit the eve better in looking over a large library to find something in it on the subject named. The Translator has culled the present volume from Vol. III of the "Lessons on Diseases of the Nervous System," which has not heretofore been translated into English. A very interesting feature of the Translation consists in the biographical sketch given of Prof. Charcot himself. It shows that if he has not had a very eventful career, it has been a very busy one; and being now only 60 years of age he is vet just as able to do as effectual work as ever. Prof. Charcot was the first of modern daysto bring out distinctly and popularize a recognition of the fact that hysteria is common among males, and is found among all nationalities. This book will repay whoever reads it with his study cap on.

Atlas of Venereal and Skin Diseases with Original Text. By PRINCE A, MORROW, A. M., M. D., Clinical Professor of Venereal Diseases, formerly Clinical Lecturer on Dermatology, in the University of the City of New York, Fasciculus VII and Fasciculus IX. New York: William Wood & Co. 1888. Large folio. Price \$2. per Part or Fasciculus. Sold only by subscription. (From Publishers.)

This Atlas, surpassing anything of the kind that has come under our notice, is being published in fifteen monthly parts, or fasciculi, each containing five folio chromo-lithographic plates—as accurate in drawing as photographs, with colorings that faithfully represent nature—and from 16 to 20 folio pages of a practical treatise upon venereal and skin diseases. These 15 fasciculi, when completed six months hence, will form one magnificent thick folio vol-

ume, with 75 plates and descriptive text of each, and several hundred figures. We regret the work is sold only by subscription, for if its Parts could be laid upon the show cases of medical booksellers all over the country, they would sell themselves—so excellent are they, and so self evident

is their practical value to every practitioner.

Fasciculus VII completes the part of this work which is intended specially to represent the eruptive venereal diseases. The plates in it represent ulcerative gummata, vegetating syphilides of the face and soft palate, syphilis of the mucous membranes of the lips, tongue, palate, pharynx, etc., paronychia and onychia syphilitica, ulcerating syphilides of the nose and commissure of the toes, syphilitic pemphigus, polymorphous syphilide (inherited syphilis, syphilitic pemphigus of the palms and soles, and maculopapular and other forms of inherited syphilis.)

In Fasciculus VIII (noticed in our September No.), the consideration of dermatoses, not specific, was begun. In Fasciculus IX, now before us, the different forms of erythema, urticaria and eczema are described with the same clinical care of representation that has characterized the consideration of subjects already named as belonging to former

fasciculi.

Index Catalogue of the Library of the Surgeon-General's Office, U. S. Army. Authors and Subjects. Vol. IX. All Words Included Alphabetically between *Medicine* (*Popular*) and *Nywelt*. Washington: Government Printing Office. 1888. 4to. Pp. 1054. Cloth.

The value of this "Index Catalogue" is so universally acknowledged by authors and students of medicine that it is only necessary to acknowledge the receipt of this Volume IX. This Volume includes 13,151 author-titles, representing 6,834 volumes, and 12,818 pamphlets, 9,999 subject-titles of separate books and pamphlets, and 29,120 titles of articles in periodicals.

Modern Treatment of Diseases of the Liver. By Prof. DU-JARDIN-BEAUMETZ. Translated from Fifth French Edition by E. P. HURD, M. D., Newburyport, Mass. 1888. George S. Davis. Detroit, Mich. 12mo. Pp. 185. Paper. 25 cents or \$2.50 for Annual Subscription to the "Physicians Leisure Library." (From Publishers.)

It will be superfluity to undertake to commend Beaumetz's productions. They are always clinical in character, practical in suggestion, and very useful to the physician. The present little volume is equal to all the others of this

series. Perhaps it should be remarked that the present volume does not treat of liver diseases specially prevalent in tropical countries.

Text-Book of Human Physiology. By AUSTIN FLINT, M. D., LL. D., Professor of Physiology and Physiological Anatomy in Bellevue Hospital Medical College, etc. With 316 Figures in the Text, and Two Plates. Fourth Edition, entirely Re-written. New York. D. Appleton & Co., 1888. Royal 8vo. Pp. xvii—872. Cloth. Price, \$6. (Fos sale by West, Johnston & Co., Richmond.)

Whoever has a copy of any of the former editions of this eminently practical text-book, would scarcely recognize the fourth edition (now before us), because the author himself observed so many defects in his former editions as to compel him to re-write the book. In the present edition, he has curtailed historical notices of subjects, adopted the new chemical nomenclature, and has avoided, as far as he could, discussions of unsettled questions. The most recent advances in physiological knowledge have been incorporated in this edition. The speculations of physiologists have been eliminated from the record of facts. And here we have a reliable work, from which information that may be expected to stand the tests of further observations can be got. The composition of the blood, for instance, is quite definitely given. The functions of the liver are well stated in accordance with the now established facts. most clearly do we see recorded the studies of a master mind, when we turn to the section on the nervous system. To have collected the facts and systematized them so as to give so clear an outline of the structures, connections and bearings of the nervous system, is a piece of physiological authorship that is wonderful and excites admiration.

The Life Insurance Examiner. By CHARLES F. STILLMAN, M. S., M. D., Medical Examiner for the Mutual Life Insurance Company for the Agency of the City of New York, etc. New York. The Spectator Co. 1888. Large 8vo. Pp. 224. (From Author.)

This book presents a concise, practical manual, which enables the beginner in life insurance examinations to conduct an examination satisfactorily. "It represents the results of many years of practical experience in the department of which it treats" so well that every one who undertakes life insurance examinations should use it as his textbook. Incidentally, to the practitioner, it will be of service in deciding many points of diagnosis and prognosis. Scarcely

a week's mail is received that does not contain a letter from some subscriber that asks, "What work, if any, can you recommend to one who is about to become a life insurance examiner?" To all such inquiries we wish to answer emphatically, here is the very book you need.

Manual of Dietetics, for Physicians, Mothers and Nurses. By W. B. PRITCHARD, M. D., New York, N. Y. The Dietetic Publishing Co. New York. Demi 8vo. Pp. 85. Cloth. Price 50 cents; in 1aper covers, 25 cents. (From Author.)

The type with which this book is printed is very small, which will interfere with its popular reading, however excellent may be the substance of its matter. We have even known persons—and doctors at that—state, as an explanation for not reading their Bibles more frequently, that the print was too small to read easily. Publishers ought to remember this. Dr. Pritchard, in his Manual, takes up each of many diseases separately, and outlines the diet suitable in each of such diseases, basing the selection of food upon the effects of the disease upon the system, and the special organs and functions involved. A good index helps materially to refer to the disease or to the diet. It is a book that every practitioner and every nurse for the sick should carefully study and keep easily accessible to refresh memory as to details of diet, how to prepare it, etc., for patients with different diseases.

Medical Diagnosis. By J. GRAHAM BROWN, M. D., F. R. C. P., Edn., etc. Second Edition, Illustrated, New York, E. B. Treat. 1888. 8vo. Pp. 285. Pressed Cloth, \$2.75. (From Publisher.)

The author of this "manual of clinical methods" is sufficiently well-known for his ability and conscientious work in the profession to commend his own book. His work is arranged so as to point out the meaning of symptoms as they relate to disorders of the different physiological and anatomical systems. It is not on the plan of most works on Diagnosis, which first name a disease, and then trace the relations of symptoms to the cause. But, locating the symptom or sign and describing it, the author tells what it means—to what condition it points. Tables of differential diagnoses are not given. No attempt at specific diagnosis is made. It simply translates the meanings of signs and symptoms, and tells in what diseases such signs or symptoms are to be found. It is a book that will prove of great benefit to the practitioner who studies it.

Treatment of Diseases of Women, Puerperal and Non-Puerperal. By CHARLES H. GOODWIN, M. D. Second Edition, Revised. New York. Leonard & Co. 12mo. Pp. 436. (From Publishers.)

Such a work as this is scarcely susceptible of review, although it is very useful. It is a compilation of the latest contributions on the subjects named in the title, based upon the most recent practical experiences and investigations of the present day by some twenty or thirty eminent gynecologists and specialists of New York City. A good index points out the page on which the views of the respective authorities are quoted, with reference to the disease named in the separate chapters. The scope of the work takes in pretty much all the usual diseases of the female, and the effort, both in descriptions and in therapeutics, is to be practical. This book serves the purposes of a consultation, as to the lines of treatment adopted by most of the eminent specialists of New York City. It would be well for all our readers to get this book for frequent reference.

Editorial.

Dr. E. W. Row,

Of Orange, Va., the President-elect of the Medical Society of Virginia, is admirably well suited to the position in which he has been placed by the spontaneous choice of the profession of this State. He ranks well as a practitioner. and possesses those qualities of head and heart which make him popular. He proposes to make himself useful to the Society during his term of office, and we bespeak for him the cordial co-operation of every Fellow. To those who are yet outside of the authority and privileges of Fellowship in the Society, we earnestly entreat that they will obey his command to "Fall In." It is to Dr. Row that the Virginia profession is so deeply indebted for many good acts while he was a member of the Virginia Legislature two and four years ago. It was to him and Dr. Harvey Black conjointly that the profession looked for medical legislation, and their influences were always mighty. The Society has an excellent President in the person of Dr. Row.

New Editor of Journal of the American Medical Association.

Dr. N. S. Davis has resigned the position of Editor of the *Journal of the American Medical Association*, and Dr. John B. Hamilton, of Washington, D. C., Supervising Surgeon-Gen-

eral of U.S. Marine Hospital Service, has been elected as his successor. We had hoped that Dr. Davis would have continued in editorial charge until after the next meeting of the American Medical Association. But as he persists in resigning, we congratulate the "Journal Committee" upon their selection of Dr. Hamilton. We extend to the new editor a cordial welcome into the brotherhood of medical editors, and our sincere good wishes that he may make the Journal as great a success as the efforts of his predecessor would have done had his physical strength enabled him to continue in charge and to direct the policy and work of the Journal. To no one, living or dead, is the American profession under so many obligations for its thorough organization, and for practical suggestions which he has demonstrated to be for the advancement of professional harmony and scientific learning, as to Dr. Davis.

Messrs. Faulkner & Craighill,

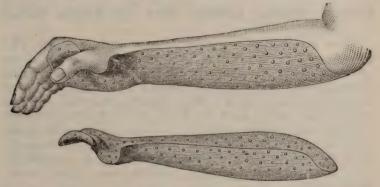
Of Lynchburg, Va., have dissolved partnership by the withdrawal of Mr. Faulkner. Dr. E. A. Craighill, however, will continue the wholesale and retail drug business at the old stand, and will retain the style of the old firm, Faulkner & Craighill. This is the firm, which prepares the popular and excellent preparation known as Camm's Emulsion of Cod Liver Oil, etc. There is no druggist or pharmacist, in our acquaintance with many excellent ones, that is more reliable in all the qualities that are commendable for such a business than Dr. E. A. Craighill. We say this after a full twenty years of personal acquaintance with him as a druggist and as a business man.

Littell's Living Age for 1889.

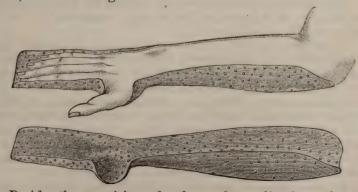
During the forty-five years of its existence this sterling weekly magazine has maintained its high standard. It is a thoroughly satisfactory compilation of the most valuable literature of the day, and as such is unrivalled. This magazine continues to increase in value; and it has become quite indispensable to the American reader. By its aid alone he can, with an economy of time, labor, and money otherwise impracticable, keep well abreast with the literary and scientific progress of the age. Its prospectus for 1889 is well worth the attention of all who are selecting their reading-matter for the new year. To subscribers it will be sent with the Virginia Medical Monthly for \$10.—thus saving one dollar. Littell & Co., Boston, are the publishers.

Lee's Metallic Splints for the Forearm, Hand, etc.

These splints fill a real want of every general practitioner. Fractures are occurring every day, and the surgeon cannot always be called to fit a special splint; the family physician has to do the best he can, and generally without the special splint laid down in the books for the special fracture under present attention. But the J. Ellwood Lee Co., of Conschocken, Pa., manufacture nickel-plated, perforated, antiseptic splints designed for the treatment of all fractures and injuries of the forearm, hand and fingers, which are the very things the general practitioner should have in his armamentarium. The following cuts illustrate the improved Bond's splint, designed for all fractures and injuries of the forearm



and hand, while the cuts following represent the combined forearm splint for all fractures and injuries of the forearm, hand and fingers:



Besides the provisions for the ready applications of antiseptics, etc., these splints are easy of application, and retain the limbs, after setting the fracture, in their proper position; this is an essential to a proper cure. Four splints come with each set when so ordered—rights and lefts—one set for adults and the other for children. Price of each splint is only \$1.

Dr. Hunter McGuire,

At the annual meeting of the Southern Surgical and Gynæcological Association. held in Birmingham, Ala., Dec. 6th, Dr. Hunter McGuire, of Richmond, Va., was elected President for the ensuing year. The next meeting of the Association will be held in Nashville, Tenn., beginning the second Tuesday in November, 1889.

Scientific American Clubbing Rates with Virginia Medical Monthly.

These two journals—regular price of each of which is \$3. a year—will be sent during 1889, for \$5.50; Scientific American Supplement (regular price \$5.) and the Virginia Medical Monthly for \$7. The Scientific American (\$3.), Sci. Amer. Supplement (\$5.), and the Va. Med. Monthly (\$3.)—all three to one address during 1889 for \$8.60. Those of our subscribers who can possibly spare the price of the Scientific American, who once take it, will not be willing to give it up, for its each weekly issue contains something of interest for every member of the family. Try it a year. "Now is your opportunity."

Association of Acting Assistant Surgeons of the U.S. Army.

We take great pleasure in reproducing the subjoined circular letter, and hope that the requests contained in it will

be promptly complied with.

Those familiar with the Army Medical History of the frontier for the past twenty or thirty years will readily bear witness to the faithful and intelligent discharge of their duties, by the Acting Assistant Surgeons of the U. S. A. In fort and in camp, on the long overland expedition, or in the Indian wars, these men' have done their duty as faithfully and with the same professional efficiecy as if they had been regularly commissioned officers. Indeed, if they have not borne the burden and heat of the day, certainly their honorable records deserve recognition and preservation.

An association of past and present Acting Assistant Surgeons of the United States Army has been formed for the purpose of securing, so far as possible, a correct history of

those who have served in this capacity, and also for mutual protection and benefit. The association desires to obtain a complete list of all medical men who have served as Acting Assistant Surgeons in the United States Army, and, so far as possible, their complete medical history, date and place of birth, date and place of graduation, date of appointment, medical service and stations, list of contributions to medical literature, inventions, etc., date of termination of service, professional positions held in civil life, present residence and address. All information from friends concerning deceased A. A. Surgeons will be gratefully received. All past and present Acting Assistant Surgeons are cordially invited to become members of the Association. The badge of the Association is the Geneva Red Cross. The enrollment fee is \$1.00. The necessary blanks will be forwarded upon application. W. Thornton Parker, M. D., Recorder A. A. A. S., Newport, R. I.

Prize Open-To Medical Microscopists.

In behalf of "The American Association for the Study and Cure of Inebriety" the sum of one hundred dollars is offered by Dr. L. D. Mason, Vice-President of the Society, for the best original essay on "The Pathological Lesions of Chronic Alcoholism Capable of Microscopic Demonstration. The essay is to be accompanied by carefully prepared microscopic slides, which are to demonstrate clearly and satisfactorily the pathological conditions which the essay considers. Conclusions resulting from experiments on animals will be admissible. Accurate drawings or microphotograghs of the slides are desired. The essay, microscopic slides, drawings or raicro-photographs are to be marked with a private motto or legend and sent to the Chairman of the Committee, W. H. Bates, M. D., F. R. M. S., President Med. Microscop. Society, 175 Remsen St., Brooklyn, N. Y., on or before October 1st, 1890. The object of the essay will be to demonstrate: First, Are there pathological lesions due to chronic alcoholism? Secondly, Are these lesions peculiar or not to chronic alcoholism? The microscopic specimens should be accompanied by an authentic alcoholic history, and other complications, as syphilis, should be excluded. The successful author will be promptly notified of his success, and asked to read and demonstrate his essay personally or by proxy, at a regular or special meeting of the "Medical Microscopical Society" of Brooklyn. The essay will then be published in the ensuing number of "The Journal of Inebriety" (T. D. Crothers, Hartford, Conn.) as the prize essay, and then returned to the author for further publication or such use as he may desire.

Drs. John E. Weeks, 43 West 18th Street, and Richmond Lennox, 164 Montague Street, Brooklyn, N. Y., have con-

sented to act as other members of the Committee.

Dr. William F. Cooper,

Of Woodville, Va., is the Third Vice-President elect of the Medical Society of Virginia for the current term, and not Dr. L. Ashton, as named on page 570 of our November number. The error was made in transcribing from the Minutes of the session. Dr. Ashton nominated Dr. Cooper, and a good nomination he made, too, for Dr. Cooper is one of the most active members of the Society, and is always alive to its interests.

The Southern Surgical and Gynæcological Association,

Holding its session in Burmingham, Ala., December 4th-6th inclusive, promised to be well attended, and a very profitable one scientifically. The programme was unusually attractive, and authors in almost every Southern State, from Virginia to Texas, and all of the Mississippi Valley States promised papers, with good titles. Our January number will contain a full synopsis of many of these papers, with notes about the session, etc.

Dr. Robert T. Edes

With his wide reputation as a Surgeon in the U. S. Navy during the War, afterwards as author of some Prize Essays—especially one on the "Physiology and Pathology of the Sympathetic Nerve—and later as a Professor in the Harvard Medical School, and a practitioner of marked ability, did the right thing, on removing to Washington, D. C., in providing a home for his patients from all parts of the country in a house adjoining his residence on 18th Street or Connecticut Avenue. See his advertisement on page 37 after reading matter.

Springdale—the Private Sanitarium

Just established at Lincoln, Loudoun Co., Va., under the personal care of Dr. I.S. Stone, we trust will meet with the success that the ability, experience and energy of its capable medical director make it merit. Dr. Stone needs no introduction to the profession, for he has steadily advanced to

the front rank, until now, by his contributions to medical and surgical science he has become well known, while yet young enough to continue his studious habits for years to come. As a special preparation for the class of gynæcological and surgical work he is now doing, he spent last winter with some of the master surgeons of Europe. His equipments are ample, and we most cordially commend his enterprise to the favors of the profession. See his advertisement.

The Trustees of the Hoagland Laboratory in Brooklyn, N. Y.

Announce the completion of the Laboratory and its equipment for practical work. Special facilities in the shape of private laboratories are provided for those who desire to prosecute original research. A library is being purchased which will contain all the literature necessary for references in the department of Bacteriology, Physiology and Pathology. The fee for the entire course of instruction is only \$15, which entitles the party to prosecute his studies until June 1st, 1889, during as many hours of the day as he may desire.

Dr. William A. Hammond's Sanitarium

In Washington, D. C., is now open for the reception of patients having diseases of the nervous system. We feel that this simple announcement to the profession, and the calling of attention to the fuller announcement on the special display card-board page in our advertisement department is sufficient. But we cannot help congratulating the profession that one so able and eminent as an author in nervous diseases—to whom, indeed, the American profession is more indebted for advances in neurology than to any one else—has established himself in charge of a hospital so well provided with every known means for treatment, and at a point so accessible from all parts of the country. His opportunities, too, for consultations with physicians who may carry their patients with them to Washington, are greatly increased by his establishment of the Sanitarium. His removal to Washington places him in a more central position, so that he can be more conveniently reached from the South and West, while it does not remove him from the North. The Resident Physician in the Sanitarium, Dr. E. L. Tompkins, is a Virginian who has had ample hospital experience to qualify him thoroughly for his duties as an assistant.

The Medical News Visiting List for 1889,

Has been received. We recognize in it a thorough revision which has brought it up to the highest degree of excellence. The 48 pages of text contains data required by the physician and surgeon in their daily work, including the latest therapeutic novelties, their doses and effects. The 176 pages of properly ruled and well classified blanks are well arranged for all records of practice, doctor's business matters, etc. The paper is fine writing paper; the backs are of flexible red leather, with flaps and pocket, with pencil, rubber, etc. Each book also has an erasible lead pencil tablet or slate, which will be found of great use to the busy doctor who wishes to dot down some memoranda. The price is \$1.25 for either the weekly edition (for 30 patients), the monthly (for 120 patients a month), or the perpetual edition.

The Physician's Visiting List for 1889 (Lindsay & Blakiston),

Comes out, in its 38th year of publication, with all the good qualities that have popularized it for so many successive years. Besides much useful memoranda, this list is issued in several sizes. For instance, that for 25 patients per week, with pencil, pockets, etc., costs \$1; for 50 patients, \$1.25; for 100, \$2. In two volumes—one volume for each half of the year—the price is \$2.50. There is also an interleaved edition, and a perpetual edition, without dates, etc. This list is the favorite with a large proportion of our brother doctors in this community.

The American Medical Association

Will hold its Fortieth Annual Meeting at Newport, R. I., commencing June 25, 1889—the 250th anniversary of the settlement of Newport and the foundation of the ancient city. Dr. W. Thornton Parker is the Local Secretary of the Committee of Arrangements.

The Eclectic Magazine,

Published by Mr. E. R. Pelton, New York, N. Y., at \$5 per annum, is an eclectic monthly of foreign literature and art of the highest value. A physician could not do better than supplement his professional reading by subscribing to this most excellent journal. It becomes better than any one of the excellent journals from which it selects articles because it selects only the best and most interesting of these

VIRGINIA MEDICAL MONTHLY.

VOLUME XV-No. 10.

WHOLE NUMBER, 178.

RICHMOND, JANUARY, 1889.

Priginal Communications.

ART. I.—Lecture on Urethral Fever. By G. FRANK LYDSTON, M. D., Lecturer on Surgical Diseases of Genito-Urinary Organs and Venereal Diseases, College of Physicians and Surgeons, Chicago, Ill. [Reported by Dr. WILLIAM WHITFORD.]

The greatest discrepancy exists in the statements of various authorities with regard to the pathology of the polymorphous disease known by the various terms of "urethral, urinary, and urine fever." This I believe to be due to the fact that these terms are applied in a haphazard manner to several distinct types of morbid phenomena consequent upon diseases of, and operations upon, the genito-urinary apparatus; and I am positive that a careful survey of the clinical evidences upon the subject will bear me out in my opinion.

"Urethral fever," as the term is ordinarily used, is, so to speak, an omnibus which comprises a series of widely varying phenomena following chronic disease or accidental or surgical trauma of the genito-urinary tract. Fallacious as the nomenclature of these phenomena may seem to be, the term "urine fever," as suggested by Reginald Harrison, is, perhaps, unobjectionable as applied to the typical form of

the disease. It is certainly the most accurate. Unfortunately, however, even this term is suggestive only of one element which may act as a causal factor in the production of the morbid phenomena which we are about to consider. Harrison has adopted it because of his opinion that the so-called urethral fever is invariably due to morbid changes in the urine at the site of injury—these morbid changes giving rise to the development of toxic materials, which, when absorbed into the circulation, are inimical to the welfare of the individual.

Whatever the cause or causes of urethral fever—and this we will consider later on—the subject is one of the greatest practical importance to the surgeon, for the various phases of this disease constitute the principal danger of operations upon, or injuries of, the urethra, prostate, and bladder.

From a clinical standpoint, I believe that we are warranted in dividing urethral fever into six forms, these forms, however, being capable of demonstration only in typical cases in each instance. They may merge one into the other, and are all secondary to genito-urinary operations, chronic disease, or injury.

(1). The first form—and by far the simplest—consists of a nervous rigor, which is not succeeded by fever, and which follows operations and injuries within a comparatively short time. This nervous disturbance is, in all probability, due to slight surgical shock, with a resulting vaso-motor disturbance of the peripheral circulation.

(2). Traumatic or surgical fever, due to the same causes as the preceding form, and dependent upon excessive reaction from surgical shock. This form of fever is quite apt to be modified by a varying degree of septic infection.

(3). Toxemia following severe shock with a resultant perverted elaboration of the urinary secretion and the formation of organic poisons similar to the vegetable alkaloids. Associated with this, we have reflex inhibition of the functions of the kidneys with its attendant uremia, the uremic element varying in degree in different cases. This we may term the typical form of urethral fever. It is sometimes

complicated by convulsions, which are directly referable to nervous intoxication.

- (4). Classical septemia, which may prove fatal within a short time, or may merge into the pyogenic form of septemia with its characteristic circumscribed, and diffuse suppuration in the various organs and tissues of the body.
- (5). Chronic urinary fever attendant upon obstructive diseases of the urinary organs.

(6). Cases of a mixed type which combine in varying degrees elements of the first four forms of the disease.

If this classification is correct, there is little wonder that the opinions of various authorities in regard to the pathology of urethral fever vary so widely. There must be some explanation for the fact that one authority claims that these varying phenomena are invariably septic; another, that they are due to ammoniacal decomposition of urine in loco, and subsequent absorption of the product; another, that they are due to simple uramia; and, last, but not least—and of this view Reginald Harrison is the principal exponent—that they are due to obscure changes in the urinary secretions, and the formation of new and, as vet, unisolated toxic compounds. It is evident to every practical surgeon that none of these alleged causes are, when taken alone, sufficient to explain all of these cases of so-called urethral fever. Simple absorption of healthy urine certainly will not cause the disease, nor, as has been shown by Dr. Keyes, will it, as a rule, produce even simple suppuration when introduced into the cellular tissue by hypodermic injection. We do know, however, that urine, in a state of decomposition, is composed of most powerful propensities for evil; in fact, there is hardly any organic substance that is so inimical to the vitality of cellular tissue. The experience of surgeons in cases of urinary extravasation will bear me out in this assertion. Future observation will demonstrate to you the fact that there is a close resemblance between the effects of extravasation of decomposing urine and those of the poisons of erysipelas, of dissecting wounds, or even the bite of venomous reptiles, as far as their effects upon the vitality of connective tissue are concerned. It is obvious to any one, who stops to consider for a moment, that there must necessarily be, in all cases of injury of, or operations upon the urinary organs, pronounced danger of septic infection. The character of the injury, or its situation, is usually such that free drainage is impossible. Decomposing urine is usually present, and is productive of more or less death to the connective and cellular tissue, and there always exists the conditions of heat and moisture. Such an environment is peculiarly favorable to the development of those minute organisms upon which septæmia is supposed to depend.

None of the explanations which have been given is sufficient to explain the fatal result which has been known to occur from the simple introduction of a smooth staff into the urethra.

There is also food for reflection in the fact that a single straight cut in the urethra—as, for instance, that produced by internal urethrotomy—is productive of less shock in many cases than is repeated stretching of the sensitive structures of the stricture by a sound or bougie. It is well known that an irritable, sensitive, and contractured tissue in any situation is much more safely and comfortably dealt with by a complete division than by attempts at stretching.

The cure of stricture by gradual dilatation is dependent upon (1) mere mechanical distension; (2) upon reactionary hyperæmia, with increased tissue change at the site of the organic deposit. The functions of the lymphatics and veins are increased in activity, and absorption takes place very rapidly. It would appear, then, that if the tissues be extraordinarily sensitive, as is frequently the case in organic stricture, and if there be present toxic principles from decomposing urine, or ordinary septic materials at the site of the stricture, or behind it, the operation of dilatation must necessarily be followed by a degree of nervous shock dependent upon the susceptibility of the individual, and by a varying degree of absorption of noxious materials. The lymphatics and veins, unfortunately, have not the power of discriminating between the various organic substances which are obnoxious to the welfare of the individual, and those which can be disposed

of in a physiological manner without injury to the blood or tissues; and they therefore take up the poisonous materials simultaneously with the products of retrograde tissue change.

The relation of organic and functional disturbances of the kidnews to urethral fever is a most intimate one. There is probably no case of obstructive disease of the genito-urinary tract of long standing which is unaccompanied by functional aberration of the kidneys; and in a large proportion of cases there occurs later an actual organic change in the renal tissues. This condition of affairs is to be anticipated and given serious consideration in every case of chronic urinary disease. The immediate effects of the kidney difficulty may not be marked, because of the activity of vicarious elimination by the skin and bowels—this vicarious action of these structures constituting the means by which the system accommodates itself to the imperfect elimination of the constituents of the urine through the usual channel. There are very few persons, even among those who consider themselves healthy, in whom the bodily sewage is perfect, and it is obvious that when the kidneys perform their functions imperfectly, this condition of defective sewage becomes one of vital importance. When, as a consequence of operations upon the genito-urinary organs, surgical shock is produced, reflex hyperæmia of the renal tissues is quite apt to result. This produces a strain upon the kidney, which in its impaired condition it is unable to withstand, and as a consequence its functions are completely inhibited, as is indicated by the supervention of uræmia.

The subject of autogenesis in its relations to the development of certain constitutional diseases demands more attention than is usually accorded it, and it is probable that physio-chemical researches in this direction will, in the future, shed new light upon many diseases, the etiology of which is now obscure. Among the modern writers who have given considerable attention to the morbid results of perverted physiological chemistry, Benjamin Ward Richardson is perhaps the most prominent. It is to his researches that we are indebted for the most widely accepted theory of the pathology

of rheumatism. It is probable that perverted tissue metabolism bears a causal relation to the typical cases of urethral fever. This perverted tissue metabolism may quite readily be brought about by surgical shock. We know quite well that mental emotions of various kinds, and those impressions upon the nervous system which result in the condition that we term "shock," may produce marked changes in the physiological secretions of the body—these changes, consisting either in an increased or diminished flow, or of obscure chemical changes of composition; thus we may have, through various nervous impressions, an increase or decrease in the quantity of the saliva, the lacteal secretion, the gastro-intestinal secretions, the urine, and of the menstrual flow. This is due to a perturbation of the trophic functions of the sympathetic nervous system.

A familiar illustration of the chemical effect of various emotions upon physiological secretions is the change in the quality of the lacteal secretion, induced by fright, anger or grief. This change, although so occult as to be incapable of demonstration by microscopical or chemical research, is most pronounced in its morbid effects upon the child-cholera infantum of a most fatal character being a frequent sequel to the emotion of anger in the mother. Precisely what this change in chemical composition may be is an open question; but it is possibly a species of decomposition which results in the formation of a poison analogous to the tyrotoxicon, discovered by Prof. Vaughan in impure cow's milk. It is well known that great care is necessary on the part of those who supply milk for the use of infants, to prevent fatigue and various sources of excitement in the cows. It is well known, too, that sexual excitement in a cow is often productive of marked changes in the milk, and may render it unfit for human food.

If these changes occur in one secretion, it is highly probable that all of the physiological secretions are susceptible to emotional influences. It is probably true in the case of the saliva, that the emotion of anger causes the development of toxic principles in that secretion; and this

may possibly explain the serious results that are so apt to ensue from the bite of an enraged human being. In the case of the urine, the influence of surgical shock may be inferred to consist in the development of organic poisons in that secretion. These, according to Reginald Harrison (who, however, believes them to be due to local decomposition), may be considered to be hypothetically analogous to the ptomaines and leucomaines discovered by Selmi and Gautier in both dead and living bodies, and which so closely resemble the vegetable alkaloids, particularly nicotine, brucia and strychnia. The toxemia resulting from such changes would explain the otherwise obscure and mysterious cases of death following the simple introduction of a sound. In some cases the development of uramia or toxamia is very gradual, and results from successive operations upon the urethra. The poisonous materials may accumulate in the system for some time, and their presence fail to manifest itself until the system is, so to speak, ready for the explosion. when a previously tolerated and comparatively slight irritation of the genito-urinary apparatus will be sufficient to develop serious results.

A competent surgeon, and one for whom I have the greatest respect, had performed urethrotomy upon an apparently healthy young man of 28 years of age. The stricture was located about three-fourths of an inch posterior to the meatus and was divided under cocaine without any difficulty or pain whatever. A sound was passed every second day thereafter, each operation being preceded by the injection of a 4 per cent. solution of the muriate of cocaine, the quantity used being about two fluid drachms. About a week after the urethrotomy, the patient complained of considerable nervousness and insomnia, but this was not considered of any particular importance. On the ninth day an attempt was made to perform the usual operation of sounding and injection of cocaine, the patient meanwhile lying upon an ordinary surgical chair. The doctor left him for a moment to obtain a sound and to give the cocaine an opportunity to affect the urethra. He was called back in about a minute by the patient, who complained of dizziness, and immediately fell back on the chair in convulsions. Assistance was called, stimulants were given, and the galvanic current used.

but without avail, the patient dying in something less than five minutes.

At the post-mortem a thorough examination of all the vital organs was made, but everything was found perfectly healthy with the exception of the kidneys, which were so extremely congested that they presented a bluish appearance similar to that of the spleen.

This fatal result was surely not attributable to the cocaine, but was evidently due to the sudden explosion of poisonous material which had been gradually accumulating in the system as a consequence of imperfect action of the kidneys and the action of slight surgical shock upon the tissues. This condition of toxemia gradually grew more pronounced and finally was so severe that a comparatively slight irritation was sufficient to inaugurate a nervous explosion. Such an irritation was produced by the mechanical effect of the injection of cocaine, and it is probable that the introduction of simple water would have had a similar effect.

The danger of the development of urethral fever is directly proportionate to the depth of the distance of traumatic and surgical injuries of the urethra from the meatus. Those situated in the pendulous portion of the urethra are not, as a rule, very dangerous as compared with those situated in the fixed or deep portion of the canal. The explanation of this is very simple—the nerve supply of the deep urethra being much more abundant and sensitive, the cellular tissue more abundant, and the opportunities for drainage much less than in the pendulous urethra. Decomposing urine is less apt to remain behind a stricture in the pendulous portion of the canal than in the deep portion—this being due to simple gravity, and to the fact that strictures in this situation are usually of large calibre. Urinary extravasation in the pendulous portion of the urethra is not apt to produce serious danger to life, inasmuch as the connective tissue is very sparse and the extravasated fluid is likely to be detected and evacuated before it has burrowed back into the perineum.

The clinical features of urethral fever in its various forms require some special consideration.

- (1). The nervous form usually appears in patients of an pressionable constitution, or who, in other words, present a decided tendency toward neurotic disturbances. Oftentimes its occurrence may be anticipated by the behaviour of the patient while he is under instrumentation. He is quite apt to have nausea, perhaps vomiting, slight rigors, partial or complete orgasm, or more or less complete syncope during the introduction of instruments into the deep urethra. Such patients are apt to develop within twenty-four hours after urethral operations or injuries, as a rule, a sharp chill. This lasts for a variable time, being rarely prolonged, and then disappears, leaving the patient about as well as before, with the exception perhaps of more or less nervous depression. Rarely, indeed, there may be a slight amount of fever or sweating.
- (2). The traumatic form is the most common: it manifests itself by a sharp chill usually within twenty-four hours after operations or injuries, and is followed by pronounced fever and sweating. The disturbance either passes off after a single paroxysm, or is followed by a period of general malaise, with perhaps a recurrence of the paroxysms for several days. In these latter cases there is present, in all probability, a slight septic element.
- (3). The third form (the typical form of the disease) may or may not be attended by violent chill coming on within twelve to thirty-six hours. The prominent symptoms are marked prostration, violent vomiting and diarrhea, coldness of the surface of the skin at first, succeeded by more or less febrile elevation of temperature later on if the patient survives, with suppression of urine—these phenomena merging in a very short time, in fatal cases, into coma of an apparently uræmic type. I say "apparently uræmic type," because, according to the theory I have advanced regarding the action of shock upon the urinary secretions, there is probably present in most cases a toxic element independent of uræmia—Cases of this kind may come on gradually and manifest themselves by a sudden explosion in the form of

convulsions, as is illustrated by the fatal case first related to you.

- (4). The fourth or septic form of urethral fever manifests itself usually by a slight (but sometimes very severe) chill; this is followed by fever of a varying degree of severity. The patient may sink into a typhoid condition, or become comatose and die within from two to ten days from acute septicæmia; or the condition may be subacute and merge into the pyogenic form of septæmia, known more familiarly as pyæmia, in which event the patient finally succumbs to the slow development of circumscribed and diffuse purulent deposits in the joints, viscera, and other structures of the body.
- (5). This form may be described as a chronic condition of toxemia and nervous irritation produced by long continued obstructive and inflammatory affections of the genito-urinary tract. This condtion of toxemia and general nervous irritation is one which is not generally recognized, but which is very important in its relations to chronic genitourinary disease. It exists in the majority of cases of organic stricture of long standing, in old men suffering with prostatic hypertrophy, in tumors of the bladder, in chronic cystitis from whatever cause it may arise, and in chronic pyelitis, particularly the form due to the presence of nephritic calculi. There is a marked tendency in patients suffering with these affections to a mild form of hectic fever: flushings of the face, with slight elevation of temperature, and perhaps followed by a certain degree of perspiration, are quite common, and nervous irritability is especially marked. Indeed, there are few diseases which are productive of so much mental depression and of so much irritability of temper as chronic diseases of the genito-urinary tract. man, with a vesical calculus, or with prostatic hypertrophy, or, for that matter, the young man with a stricture, is apt to be unreasonably morose and irritable. In all of these cases there is apt to be present more or less obscure rheumatic or neuralgic pains in various situations. After long retention of urine from any cause the majority of patients will suffer

for a few days or weeks from more or less marked elevation of temperature. These different general conditions are due, in my opinion, to toxemia, which is dependent upon (a) imperfect elimination of the products of retrograde tissue metamorphosis; (b) to a greater or less degree of absorption of morbific materials produced by inflammation, and the decomposition of residual urine behind the site of obstruction. You will find that many patients suffering from chronic genito-urinary disease of an obstructive or chronic character fail to realize how sick they are until the diseased condition has been removed, or, at least, greatly improved. They then find that slight disturbances to which they had paid comparatively little attention, and which they had never dreamed of attributing to their urinary trouble, have disappeared. This is due in a great measure to the circumstance that reflex nervous irritation has been relieved; but more than this, it is due to the fact that the constant absorption of poisonous materials, from the site of disease or its vicinity, no longer occurs.

(6). I have designated a sixth or mixed form of the disease. Occasionally cases will occur in which there are, for example, equally strong evidences of septic disturbance and of uramia, with possibly a tendency to disturbance of the nervous functions.

The principal measures of treatment of urine fever are of a prophylactic character; for, unfortunately, the marked forms of the disease are seldom recovered from, while the milder forms tend to spontaneous recovery. The principal feature of prophylaxis should consist of strict attention to those principles laid down in the lecture on "genito-urinary hygiene." If the functions of the kidney are stimulated by alkaline diuretics, and the skin and bowels kept in an active condition, thus affording vicarious relief to the kidneys, the patient is placed in the best possible condition to avoid those complications which have been described. In addition to these measures, moderate doses of antiseptic drugs may be given internally. Of these I prefer boracic acid in 10-grain doses, as recommended by that excellent authority, Professor Palmer, of Louisville. Salicylic acid or, preferably, the sa-

licylate of soda, is also an admirable remedy. Local antisepsis in cases of chronic bladder and prostatic disease is of course essential and can be accomplished by irrigation with mild antiseptic lotions, such as carbolic acid, borate of soda, or boracic acid, and the bichloride of mercury. You should avoid operating upon cases complicated by structural renal disease if it is possible to do so; and if an operation be unavoidable, you should not only be careful in your manipulations, but you should throw the responsibility of your results entirely upon the patient and his friends. Prior to operative interference, particular attention should be paid to the urine and to local antisepsis. The patient should be put to bed and instructed to remain perfectly quiet; he should be put upon a milk diet and moderate doses of quinine (five grains), three times daily, for a week to ten days previous to the time for the operation.

Various drugs have been recommended just before or at the time of manipulations or operations. Quinine and morphine, in ten and one-fourth grain doses respectively, are the most popular remedies, and unquestionably have an excellent effect by increasing the resisting power of the nervous system, and thus lessening the liability to shock. Jaborandi is also recommended for the same purpose; and inasmuch as its physiological action is such that it must necessarily relieve any strain upon the kidney, this drug seems to me to be one of our most philosophical remedies. The muriate of pilocarpine may be given internally instead of the fluid extract of jaborandi, or it may be given in hypodermic doses of a fourth to one-half grain. In case uramia supervenes, this latter method of administration is absolutely essential.

The milder cases of urine fever (the nervous and traumatic forms) are rarely fatal, but may possibly lead to the severer forms of the disease. Opium and jaborandi, with perhaps (in the traumatic form of the disease) aconite or veratrum viride, constitute the best method of treatment. In the uræmic form, our attention should first be directed to the vicarious elimination of urea, for we can waste no time in attempting to restore the functions of the kidneys within the first few hours after the supervention of the uræmia,

particularly if coma has occurred. Pilocarpine will act upon the skin, even when the patient is in a comatose condition, and it should be given freely. The bowels should be moved by croton oil, two or three drops of which in combination with five or six drops of olive oil, may be placed upon the back of the tongue. If the patient be able to swallow, elaterium, in doses of from one-eighth to one-third of a grain, is preferable to any of the hydragogue cathartics. Hot baths should be given, and dry or wet cups applied over the region of the kidneys. Digitalis may be given internally as a diuretic after the emergency is over, but it would be a waste of time to attempt to accomplish anything by diuretics before vicarious elimination of urea had been attended to.

When the septemic or pyemic form of urine fever develops, very little can be done in the majority of cases beyond supporting the powers of life by free stimulation—a fatal result being almost inevitable. It is, however, our duty to attempt to avert a fatal result by incision and drainage, where possible; and if the case is clearly septic, a free incision at the sight of the stricture, or a perineal cystotomy in cases of bladder and prostatic disease, constitutes the proper surgical procedure.

The management of cases of chronic urinary fever consists in local antisepsis by irrigation and the removal, as soon as possible, of the organic condition upon which the gradually increasing septic infection depends.

ART. II.—Treatment of Fractures of the Forearm. By Dr. JOHN BROWNRIGG, of Columbus, Miss.

Believing that we have not attained a perfect method of treating the most common fractures of the forearm, I present for consideration some new appliances which I have used with good results. In these fractures it is best to prevent flexion, extension, pronation and supination of the

^{*}Read before Southern Surgical and Gynecological Association at Birmingham, Ala., December 5, 1888.

forearm. It is also necessary to keep the forearm splints parallel to each other transversely and longitudinally. Colles' and Barton's fractures require a different appliance, which will be described separately.

The roller bandage has done so much harm in unskillful hands, that I have abandoned its use, except on the hand.

With the elbow fixed at a right angle, the inside splint should be a little wider than the forearm, and long enough to extend from behind the elbow to the metacarpo-phalangeal articulation. The outside splint should be of the same width, and long enough to extend from behind the elbow to near the styloid process of the ulna, and it should be cut out under the thumb. Two pieces of the same thickness as the splints, and one inch wide, should be shouldered into the outside and inside forearm splints, so as to present a plane surface with them; and these two pieces are to be secured to the splints with little nails, so that they (these pieces) will be at right angle with the splints, and opposite the axis of the arm, and long enough to extend up the arm to below the prominence of the deltoid muscle. To these inch wide pieces are tacked, next to the arm, above the elbow, two bands of tarboard, wide enough together to envelop the arm and meet above the forearm at the elbow, when flexed, and extend upward as high as the inch wide pieces. If these bands extend higher up the arm, they will be pushed down by the prominence of the deltoid muscle, and the splints with them, so that the bones will be bent at the point of fracture. The pieces of tarboard should be soaked in hot water, so as to be moulded to the arm, and lined with cotton wadding and cloth next the skin.

The forearm splints should be made an inch longer than necessary. After the tarboard bands are tacked on, apply the splints, and mould the tarboard bands to fit the arm, and then cut the lower end of the splints off, so as to be of the right length. These forearm splints should be notched on their outer edges, to keep the strips of cloth to be tied around them from slipping.

Strips of cotton wadding should then be laid on the side

of the splints next the arm, so as to fit the arm—in some places thick, in others thin—and a piece of cloth sewed around the cotton wadding and splints, drawn so tight as to cause the cotton wadding and cloth covering to present a slightly convex service, as used by the late Dr. F. H. Hamilton on his forearm splints. Too much convexity is not desirable, as the bones may be pushed too far apart, particularly if the strips of cloth are tied too tight around them. There should be but little cotton under the hand and at the elbow. When the bones are, from any cause, disposed to separate too far, a many-tailed bandage, applied at the point of separation, and extending to the hand, will prevent it.

Apply a narrow roller bandage to the hand from the wrist to near the end of the fingers; apply the splints, and if they fit, bind them on with a few strips of cotton cloth, tied around the arm and forearm parts, so as to exercise gentle pressure. These strips can be loosened or tightened by any one as the arm swells or shrinks. These convex pads serve well to keep the bones apart, but caution is required in their use, as by binding them too tight, the bones may be forced too wide apart or forced out of position.

When the ulna is broken near its middle, the upper fragment is sometimes drawn away from, and the lower towards the radius, so as to cause a separation of the broken ends. It is at this point that ununited fracture often occurs. To prevent this, a strip of thin board not quite so wide as the space between the lower edges of the forearm splints when applied, should be padded with cotton and rolled in cotton cloth, and placed underneath the strips which bind the splints on, so as to keep the ulna straight. This thin board should be of the same length as the outside splint. The forearm should then be placed in a sling, with thin strips of wood sewed in its upper edges.

In 1885, I read a paper before the Mississippi State Medical Association describing two rectangular splints which I had used in these fractures, before I had seen Dr. John H.

Packard's account of the use of an inside rectangular splint.

Dr. Scott's rectangular splint prevents motion of the elbow, pronation and supination, but does not provide for keeping the bones apart, and the forearm is placed in a position of forced supination which is very uncomfortable. Finding the straight rectangular splints disposed to slip down, I adopted those described above. Very moderate pressure is required, and it is difficult to displace them. A many-tailed bandage should be tied around the hand and splint to keep the hand up.

Barton's or Colles' Fracture. All the fractures of the lower end of the radius, whether transverse or comminuted, or the oblique fracture first described by Dr. Barton, require extension and counter-extension. These cannot be obtained by using the hand as a lever and the lower end of the ulna as a fulcrum, even when its semi-articulation with the carpus is not destroyed. The displaced fragments cannot be forced into position and kept there by coaptation splints; and if this should be accomplished, the amount of pressure required leaves the wrist and hand stiffened.

Fractures near a joint almost always leave the joint stiffened, unless early motion is resorted to. This inflammation is almost certain to attack the articulations of the carpus. Internal and external coaptation splints, no matter how shaped, prevent motion, and more or less pressure on the carpus is necessary. It is important to preserve the proper position of the lower end of the ulna in relation to the carpus. The cause of the loss of prominence of the styloid process of the ulna is due to the twisting of the carpus with the fragment of the radius attached inward, and it is also drawn to the radial side of the forearm, by the muscles attached to the hand. This displacement of the lower end of the ulna is more marked when its semi-articulation with the carpus is destroyed.

The contraction of the muscles causing this displacement should be resisted by extension and counter-extension. If one grasps the hand and twists it forcibly inward, a good idea can be formed of the manner in which this displacement occurs.

If the muscles of the forearm are resisted by extension and counter-extension in the direction of the axis of the radius, there will be a tendency to readjustment of the fragments, and with very little lateral support this can be accomplished.

For this purpose, I have provided a splint composed of an iron bar sufficiently strong to prevent motion of the elbow, and to keep it flexed at a right angle. The bar extends from below the prominence of the deltoid muscle to the elbow, where it is bent so as not to press on the elbow, thence along the radial side of the forearm, which is between pronation and supination, the thumb being upward, to beyond the ends of the first phalanges, when the hand is flexed, where it is bent downward at a right angle about three inches. Where the bar passes over the thumb it is bent upward so as not to press on it. In front of the arm, a tarboard splint or band is riveted to the bar, wide enough to extend from the top of the bar to near the forearm, and long enough to nearly envelop the arm. To the forearm part of this bar is secured a similar tar-board splint by two strips of sheet iron riveted to the tarboard splint, and bent loosely over the iron bar, so that the splint can be made to slide up or down on the bar. This tarboard splint should be as wide as the forearm on its inside, and a little over half as wide on the outside—care being taken that it is not wide enough to press on the styloid process of the ulna nor on the ulna. It should be long enough to extend from near the elbow to the lower end of the radius.

The band should be flexed loosely, the ends of the first, second and third fingers resting easily on the ball of the thumb. A roller bandage about an inch and a half wide should be passed around the wrist three times and the end stitched. A broad band should be stitched to the bandage around the wrist on the back of the hand, and carried around the flexed fingers and stitched to the bandage on the inside of the hand at the wrist, to retain the fingers in

a flexed position. The object of this is to preserve the parallel position of the metacarpal bones, and to prevent their being folded inward upon each other by the extension band described as follows: A belt cut biassed to fit the hand near the carpus, and buckled securely so as not to slip over the hand is applied. Two rings of brass or other metal are sewed to the lower edge of this belt, one on the outside and the other on the inside of the hand.

Extension is obtained by a cord passed first over the bent lower end of the bar, the ends being then passed through the rings, and tied over the bent end of the bar. Counterextension is obtained by the pressure of the tarboard splint against the arm above the elbow. The tarboard splints should be lined with cotton wadding and cloth next the skin, and secured to the arm and forearm by many tailed bandages, the ends of which are tied together. After the cord is tightened sufficiently, the forearm tarboard splint should be slipped on the bar towards the hand until the lower end reaches near the carpus, and can be made to act as a coaptation splint at the point of fracture, but only gentle pressure is required—the contraction of the forearm muscles causing the displacement being resisted by extension and counter-extension. Sometimes a narrow roller bandage is required to keep the hand from swelling, Constant slight motion of the carpus is permitted. When the splint is applied the thumb should be under the iron bar. This can be secured by applying the belt around the hand so that the ring on the back of the hand will be near the thumb, and the one on the palmar side nearer the little finger. This causes the hand to be twisted outward, which is the reverse of the abnormal position resulting from the fracture. If greater lateral pressure should be required, it can be obtained by two pieces of thin board placed transversely opposite the point of fracture, one inside and the other outside the forearm—the ends projecting a little so that cords can be tied around them below and above the forearm. I have only had to resort to this in a case of ununited fracture of eight weeks' standing.

ART. III.---Indications for Operative Interference in Cerebral Troubles.* By T. O. SUMMERS, M. D., Jacksonville, Fla.

The article which I had intended to write upon this subject would have been far more elaborate had not the unfortunate epidemic come upon us exactly at the time I had selected to commune with my professional brethren in a good old practical way. The great difficulty in the path of surgical investigation is the vague, indefinite glamour which specialism has thrown about it. And it is with peculiar pleasure that I hail the organization of an association like this, which represents, as once the immortal Bowling said, the grandest system of intellectual medicine which the world has ever seen—(for the surgery of the Southern States of America has written its name on the highest pinnacle of glory). I shall endeavor rapidly and concisely to offer you what I believe to be the best basis of practical operation in cerebral surgery that recent operations have decided.

I shall begin by asking the question, Under what conditions should the cranium be trephined?

Ans. I.—In lesions of the ventricles. In the ventricles of the brain two lesions are pathologically considered: (a) Hæmorrhage and (b) liquid effusions.

How are these to be determined? (1) By persistent hemiplegia; (2) by persistent hemianæsthesia; (3) by hemiopia, and (4) by ptosis attended with general or special paralysis in voluntary muscles.

Remarks.—Convulsions of a general character are of no localizing significance; and if even in an acute lesion they occur, in such a lesion, and also in a chronic lesion, they prove the disease to be below the cortex, and out of the range of surgical interference. It might also in this connection be well to remark that conjugate deviation of the eyes from the side paralyzed, or towards it, if there are convulsions or much rigidity of limb, is of no localizing significance.

Ans. II.—The second condition calling for the use of the

^{*} Presented to the Southern Surgical and Gynæcological Association, at Birmingham, Ala., Dec. 4, 1888,

trephine is cerebral hamorrhage. This is almost always due to the rupture of an artery—very rarely to that of a vein. Veins rupture chiefly under such extreme pressure as attends strangulation, and under the same circumstances capillaries may give way and cause minute extravasation. In this case the trephine affords the only relief, and the effect is brilliant.

Ans. III.—Arterial Occlusion. The pathological processes may cause the occlusion of thrombosis—the former, of course, being a plug from a distant source, arrested where the artery is narrower than the plug; the latter being a clot formed in the artery by coagulation of the blood at the spot obstructed. Both of these are generally relieved by trephining.

Ans. IV.—Abscess of the Brain. This, of course, is usually due to injury to the brain, but may and does often occur from adjacent suppuration, especially bone disease; or to suppuration at a distance, generally in the lungs. General pyæmia, disease of the ear, orbit or nose may produce it, and any one of these causes will prove rapidly fatal if the trephine is not early applied.

Ans. V.—Cephalalgia. This is by far the most common of cephalic troubles calling for the use of the trephine. The indefiniteness of the term cephalalgia is the very point upon which I desire to turn the purpose of this article; i. e., it is not at all necessary to determine the exact point of lesion, inflammation or traumatism before deciding to plant the

trephine. But to this we shall refer later on.

Cephalalgia, like charity, covers a multitude of sins, and, like charity, it suffereth long. It is a most convenient though unmeaning term. It is like neuralgia. You can throw it at your patients and they will swallow it whole and be satisfied. I remember upon one occasion being called to the country to see a case which had baffled the diagnostic powers of the physicians in that "deestrict." Old women were sitting about the fire-place with arms akimbo awaiting the oracular expression of "that 'ar city doctor." I soon found that I knew nothing about the nature of the case myself; but, putting on a bold front, I declared emphatically

that, after careful examination, I was firmly convinced that the patient was suffering from neuralgia.

——"and still the wonder grew, That one small head could carry all he knew."

An old woman jumped up and shouted, "I told you so! I jest knew it was new-ralijy. That 'ere doctor knows what he's talkin' of. He orter to be practisin' in New Yawk today. You hear me talk." So much for fame.

Ans. VI.—Traumatism. It is hardly necessary to state in a concisely written paper of this character that the skull should be trephined over the point of injury even in suspected fracture; therefore I dismiss this summarily, believing it to be established as one of the axioms of surgery.

Ans. VII.—Epilepsy. In all the range of surgical therapeutics there is nothing which gives such satisfaction as the use of the trephine in epilepsy. I have rarely seen a case in which it was contra-indicated.

I shall now proceed to mark out all that is practically known about the localization of disease or injury for the purpose of trephining. The symptoms produced by brain lesions of course vary with the locality of brain structure, and it is only by such pathological expression that we can, a posteriori, determine the seat of injury or disease. I shall endeavor to arrange these in a concise tabular form, so that they may be referred to without wading through the great marshes of cerebral technology:

I. Prefontal lobe. The parts of the ascending frontal are rarely attended with motor or sensory symptoms. Insanity is more frequent from lesions here than in any other locality. There is one prominent exception to the above rule, and that is the distinct motor aphasia which invariably points to lesion around the anterior limb of the fissure of Sylvius.

II. Central area. In this area (composed of the ascending frontal, ascending parietal and superior parietal) lesions cause motor paralysis as follows: Lesion of upper third—loss of power in leg; middle third—loss of power in the arm; upper half of lower third—loss of power in face; lower part

of ascending frontal—loss of power in lips and tongue, and,

when on left side, aphasia.

III. Parietal lobe. Symptoms not well differentiated. Lesion recognized generally by the vagueness of expression. Among the symptoms which have been remarked are hemianæsthesia, hemiplegia, defects of speech, amblyopia of the crossed variety, and, more distinctly than all else, word blindness.

IV. Occipital lobe.

These brain areas are all that come under the range of surgical relief. I have stated them dogmatically, as I have not at present time to elaborate them fully.

In conclusion, let me say, that the trephine does less harm and more good than any surgical instrument. Fear of not localizing a lesion should not deter the surgeon from operating, for it does good anyhow, as the old negro woman said

when she spanked all her children every Saturday night.
"You haint done nothing bad to-day, but you're gwine to

do it, and a lickin's good for you anyhow."

ART. IV.—Dermoid Cysts of the Coccygeal Region,* By E. J. BEALL, M. D., Fort Worth, Texas.

Pathological histology offers us nothing wholly satisfactory in regard to tumors. What is held respecting their etiology is not based upon exact histological knowledge, but

is mainly hypothetical.

There are those who consider tumors as tissue-overgrowth, and define their development as due to causes and conditions which ordinarily determine hyperplastic growth. In many instances it can be demonstrated that such conclusions are incorrect, for in such, tumor-growth can be shown by microscopic evidence to be of a different nature than the structures from which they spring, or originate. It may be truly said that a tumor, or neoplasm, nearly always differs in construction from the tissue out of which it grows.

^{*} Read before the Southern Surgical and Gynæcological Association in Birmingham, Ala., Dec. 6, 1888.

Another class of etiologists have inferred that tumors are formations resulting from inflammatory changes. It can be shown, however, that the entire evolution of neoplastic histogenesis is widely at variance with the formative processes that originate in inflammation. We may thus also exclude traumatism from the genesis of tumors. Experience sustains the conclusion, and when it so happens that a tumor appears to develop from traumatized or inflamed tissue, such a result is so rare it may be considered coincidental, and does not prove that such injury or inflammation sufficed to induce the tumor in tissue primarily normal. Other factors are needed before we can claim that the genesis of tumors is due to traumatic or inflammatory causes alone.

Again, it has been suggested to look to the embryo for the factors of tumor production. When we consider that tumors occur at all ages of life—in the new born babe and in the centenarian, and in the tissues without the suspicion of abnormality attaching to them, some other explanation will be pertinent before the embryonic theory can take a strong

hold upon the profession.

The beautiful hypothesis of Cohnheim bolsters the embryonic theory, and presents the subject for adoption versus Virchow's ideas, to which I have already alluded. He refers the actual evolution of tumors to factors generated during the embryonic period, but considers development after extrauterine life has occurred and progressed to any age, due to the continuance of germinal embryonic cells in the otherwise mature organism. The tumor takes its origin from a delayed, lingering cell which escaped utilization in the normal development of tissue and remained unutilized until some external condition supplied the impetus that induced cell multiplication which resulted in tumor production. He thinks the tumor germs, consisting of embryonic cells, may be small and elude recognition; be quite unrecognizable among the ordinary anatomical elements of the tissues of the body in which the tumor developed. His definition of a tumor then, is: "An atypical new formation, starting in a latent embryonic rudiment."

Much that we know of tumors can be harmonized with

the Cohnheim theory or hypothesis. Tumors having structures much alike, and the earlier forming stages of certain tissues lend weight to Cohnheim's views. We know that there is a class of tumors which date their origin to the embryonic stage, and such is perhaps the nature of the teratomata, or congenital tumors, to which, as a special class, the dermoid tumor belongs.

Cohnheim's argument, in sustaining his views, is partly predicated upon the observations: That many tumors are hereditary; that many are discovered at birth, or develop in early infancy; that a preference is manifested by tumors for sites, when, in the earlier developmental stages, some complication of structure occurred, such as places where diverse epithelial formations pass into each other, (as lips, stomach, cervix uteri, etc.,) or for parts where the evolving process is complex (as genital apparatus). In fine, the general atypical nature of tumors is in favor of the probable correctness of his views. Some will concede that these arguments speak strongly for his theory, and will, at least, admit the probability of its proper adaptability to certain classes of neoplasms, but not applicable to all tumors.

The theory that tumors have an inflammatory, or traumatic origin is held by many, and number among its advocates some of the more advanced etiologists of the present age. We conclude, however, in reviewing these and other hypotheses, that the future will, perhaps, develop other ideas that shall present such facts, based upon more mature observation, as will harmonize professional thought in regard to the interesting and important subject of tumor genesis.

In a very late issue of the "Annals of Surgery" I have read a review of a volume, written by W. Roger Williams, upon the principles of cancer and tumor formation. Without close attention, Williams' theory would be considered a rehash of Cohnheim's; but such is not strictly the case. In the chapter on reproduction the author stated: "I have arrived at the important conclusion that the processes of repair and reproduction of lost parts, and the various morphological variations, including bud-cancer and tumor formation, are nothing more nor less than abortive attempts of

certain cells to reproduce new individuals." Whence it follows that the laws of reproduction are also the laws of tumor and cancer formation.

There is still another theory: The microbic. I merely make mention of these two last hypotheses of tumor genesis. How they will be received by the profession, is a problem for future solution.

The dermoid cysts, or tumors, which have been claimed as a special class of teratomata, have many peculiarities in common with the normal skin of the body, but occur in positions where skin formations do not normally belong.

The tumors are of interest to the surgeon as well as the gynæcologist. The latter may encounter them in connection with the female organs of reproduction. When combined with the ovary, if very small, they may be distinguished by their contents and by the fact that their walls are thicker, whiter and firmer than such envelopes of the Graafian follicles. The larger varieties of these cysts, in this location, have a firm fibrous envelope; and the microscope will reveal corium and epidermis, hair follicles, sebaceous and sudoriferous glands. Now and then adipose tissue, teeth, bone and cartilage are found.

Both young and old are subject to these tumors, but more common to the former class. They may develope slowly or rapidly-may remain dormant indefinitely. I think development is more rapid in the young, as a rule. In five recently observed examples, situated at or near the coccygeal region, development began synchronously with the appearance of the beard and pubic hair; all occurred in male subjects. Do not these growths near the mesial line of the body indicate that such formations are derived from the same rudimentary elements as the skin? Is their evolution dependent upon aberrant germinal cutaneous cells from the epiblast which have wandered to an abnormal site, and then at a later period, when activity is given by natural causes, to skin function or its hair genesis, have begun to develope after their kind? Perhaps more probable and pertinent to the cococygeal dermoid, which we may consider an external dermoid, is the hypothesis:-That no epiblastic germinal

aberration occurs, but that the epiblastemic cells are turned inwards during feetal development, and later on when extrauterine life has arrived and certain stages of physical maturation are completed, through the law of tissue evolution, these laws spring the activities that develop the tumors, abnormal only because of unnatural position. The same view, I think, will hold in regard to other dermoids than the coccygeal, which may be classed external also—such as those occurring at the extremities of the eye-brows, those intimately connected with bronchial cysts, etc.

The cysts in the coccygeal region vary somewhat, histologically, from those encountered in the ovarian region. Such has been my personal experience. Hair, sebaceous matter, epithelium, fibrous and granulomatous tissues have been found, but neither bone nor teeth, except in the true teratomata.

The observation of five cases of coccygeal dermoid cysts (so-called from location), induce me to present the following inferences:

If a person, who is to become the subject of dermoid cyst, after passing the age of puberty, be examined, there will in all likelihood, (not invariably) be found a depression, or dimple, at or near the sacro-coccygeal region. This dimple, or depression, may be shallow, and the inturning of epiblastic cells is so insignificant that, at some subsequent period, when life's activities are exaggerated by advancing age, only the development of sebaceous glands will occur, and only the result of an aggregation of sebaceous material will be found—no hair, because no hair follicles are present. Such cases present us with an imperfect development of a dermal cyst-and a more perfect formation of the mesial unition that belongs to the embryonic age.

While doing an operation a few days ago upon an aged subject for fistula-in-ano, I observed a pit, or depression, as herein before described. This depression was filled with hardened sebaceous material, but the inturning of the skin elements were incomplete, and only the quasi, or partial dermic cyst, existed.

I have, under observation at this time, a lad 13 years of

age, whose mother I attended at his birth, and upon whom I discovered the dimple, or depression I have described. When the age of puberty shall arrive with this boy, and skin function is energized into activity, and follicles and glands shall assert increased function, I confidently expect a greater or lesser development of such tumor as I here present for your consideration. I often think of the now happy boy, ignorant of what is in store for him when he nears manhood, thinking, perhaps, he will go from "pillar to post," from doctor to doctor, as I have seen in such cases the one diagnosing an immature abscess; another caries or necrosis of sacrum, or coccvx. At last an incision reveals the nature of his trouble, when he has had the mental and physical torture that attaches to physical infirmity, till he reaches the age of twenty-one to twenty-eight years. This is no overdrawn picture. In more than one instance I have heard the story here indicated.

In the cases which came under my observation, when the subjects were twenty-one to twenty-six years old, I saw this pit, or depression. Obliquely away from the pit and mesial line, several times extending down to the gluteal region, I saw the elevated contour of the tumor. Once or twice, extending near the external edge of the sphineter muscle, I saw the same semi-fluctuant elevation that marked the dermoid tumor. These came under notice when the products of the functional activities of the skin had accumulated at the points of abnormal deviation, which began at puberty, perhaps not noticed until several years thereafter. Seemingly an irritation was consequent upon the accumulation. In one or more cases a probe could be carried from the depression above to the cyst cavity below. All ran in a downward, or downward and outward direction. When communication with the air had occurred, by examination or by ulcerative process, pus would be added to the retention products.

I pen these lines not on account of the danger to life, (for observation teaches that this does not exist), but to direct attention to a subject little written about, and that I may perhaps save some fellow practitioner a degree of mortification that comes of misdiagnosis, for there is a dearth of literature in regard to dermoid tumors of the coccygeal region.

I was invited upon one occasion by two intelligent gentlemen of the profession, to witness an operation for a caries of the sacrum, or coccyx. When I saw the case I observed a dimple, or depression, at or near the sacro-coccygeal junction. I suggested that the case was not one of caries or necrosis, but that a dermoid cyst was to be incised and curretted. A few moments only were needed to verify the correctness of the diagnosis I had volunteered.

The preceding will show that these tumors may be mistaken for caries, or necrosis of adjacent bones. They may be mistaken for abscess of the connective tissue of the coccygeal region; may be mistaken for abscesses denominated ischio-rectal; may be mistaken for fistula-in-ano. I think a case of abscess (?), once upon a time, was brought to my friend, Dr. Wyeth, of New York, that proved to be a dermoid cyst of the ano-coccygeal region. Other conditions, benign or malignant, may be thought present, when, in truth, only a dermoid cyst, or tumor is to be dealt with.

My experience leads me to the inference that the condition I imperfectly present to you is of more common occurrence than the writings in text-books indicate.

I might write more upon this subject, but enough has been said to put the hearer on his guard when investigating disease or tumors in the region referred to in this paper.

The treatment will suggest itself: Incise the tumor, currette with a Volkman's spoon, and treat with the most approved methods of antiseptic procedure. Nothing more is needed. If one wishes, after thorough removal of the deviated growth, the parts may be approximated with reasonable hope of unition, and more rapid cure than by the former method.

With this brief and imperfect review of the theories held to-day respecting tumors, as I have culled them from the memories of reading, and the clinical inferences presented, drawn from my experience with dermoid cysts of the coccygeal region, I end this paper with stating: That these cysts or tumors have been found in various localities other than that to which I have directed your attention, but you will not find much more than bare mention made of them, and then,

seemingly, as among the earlier writers, merely such remarks as will gratify a curiosity attaching to such manifestations of abnormally located evidences of deviated development.

Note.—Since the preparation of this paper, I have seen in the Annals of Surgery a review of a volume by W. Roger Williams upon "The Principles of Cancer and Tumor Formation." In the Chapter on Reproduction, the author states: "I have arrived at the important conclusion that the processes of repair and reproduction of lost parts, and the various morphological variations, including bud-cancer and tumor formations, are nothing more or less than abortive attempts of certain cells to reproduce new individuals. Whence it follows that the laws of reproduction are also the laws of cancer and tumor formation."

The hypothesis referred to in this note is new. The arguments sustaining it are plausible. How it will impress

the profession, the future must determine.

ART. V.—Surgical Procedures in Traumatic Epilepsy.* By JNO. T. WILSON, M. D., Sherman, Texas.

Reflex epilepsy from traumatic injuries of the brain is not a rare trouble, and nearly every surgeon meets with one or more cases during his professional life. I believe it to be proportionately the most curable of epilepsies. It is a very important affection, and requires more study by the general practitioner than is usually given it. The great mistake too frequently made is either not operating at all or waiting too long. In truth, the tendency is too frequently to neglect these cases or prescribe only a palliative treatment.

In this day of rapid surgical advance, when the hitherto sacred precinct of the cranium is invaded with so much less hesitation than in former years, and with such comparative safety, since the introduction of antiseptics, and with the brilliant record of brain surgery before us, where tumors and other pathological lesions are diagnosticated and removed with such splendid results as to astonish the world—

^{*} Read before the Southern Surgical and Gynecological Association, Dec. 6th, 1888.

cases of epilepsy caused by a depressed fracture should not be permitted to progress without giving the unfortunate and wretched victim an opportunity to receive the benefits an operation might bring him. Trephining does not aggravate the convulsions, and even if no benefit should result, it does not leave the patient in a worse condition if he has been properly prepared for it, and if the operation is carefully done under strict modern rules. The complication of hemiplegia, and its liability to remain, as taught by the English surgeons, should not deter us from operating and curing the fits if possible.

In my limited experience with this disease, the convulsions in the majority of cases resulting from traumatism are extremely severe, sometimes quite frequent, and are usually, to a great extent, one-sided. That is, nearly all the muscles of one side of the body are involved in the spasm, though not in the same degree; the muscles of the face and upper extremity of that side are in most cases more affected than those of the trunk and lower extremity. Antispasmodics generally have less control over these traumatic cases than over those that result from other causes, or else their controlling influence does not last so long. In most of the cases that I have seen, the general health was fairly good: but they had morbid appetites and ate ravenously large quantities of food. In all the cases, to the best of my recollection, the frontal, temporal and anterior region of the parietal bones sustained the injuries.

General treatment, attention to general health, with tonics, antispasmodics and, more especially, the bromides, always lessen the severity, and, to some extent, the frequency of the attack for awhile; but if given for any considerable length of time, they have a deleterious effect upon the health, and also seem to induce early dementia.

Persons predisposed to epilepsy, or who are very nervous and excitable, are more liable to epilepsy from fracture or other injuries of the skull and scalp than those who are differently constituted. Hence, in one person a slight depression in the skull will produce it, while in another a deep one in the same portion of bone will not. In the nervous cases, especially, is trephining likely to do good; but in all cases calling for operation it is of paramount importance to do it thoroughly.

In this connection I will report two cases that taught me an important lesson in regard to operating upon the skull and brain for epilepsy caused by an injury, and the lesson there learned served me a useful purpose in other cases.

Case I.—J. H. O., American, et. 40, male, farmer. reliable family history could be obtained. General health fair, though not robust; very nervous temperament. was affected with chronic melancholia, and attempted suicide by cutting through his skull with the sharp corner of an axe, the wound being through the coronal suture, involving the frontal and parietal bones about half an inch above the temporal bone of the right side. Not succeeding by this means, he made another attempt a few days later by driving a No. 6 nail through the opening in the skull made with axe. This nail was driven for more than an inch into the cerebral tissue. A physician saw him soon after and extracted the nail, and dressed the wound by the ordinary old-fashioned method. Some suppuration supervened, and the wound closed by granulation. Paralysis of the left side of the body came on, and in six weeks this was almost complete. A few weeks after the closure of the wound epileptic convulsions developed, and they recurred at intervals of one to three weeks for several months; as time passed, they grew more frequent and severe. Bromides in full doses seemed for a while to lessen the severity, but not the frequency of the attacks, and finally seemed to lose all control over them. After their use for several months, his digestion began to suffer and symptoms of beginning dementia became strongly marked, but, strange to say, the paralysis slowly improved sufficiently to allow him to walk about with the assistance of a cane. At the end of nine months from the reception of the injury the bromides were discontinued. He was then put upon a tonic regimen for about two weeks, when he was anæsthetized, the scalp shaved, a crucial incision made over the old cicatrix; and as the scalp was dissected up and drawn back, there was found a small oblong depression of the skull and in the centre of the depression a small opening was observed leading down to the dura mater, the bone having almost sloughed away. The trephine was applied and two buttons removed embracing the entire length of the depres-

sion. A considerable cicatrix of the dura mater was observed, but it looked healthy; and as it was thought the epilepsy was caused by the depressed bone, this cicatrix was not interfered with. After all the depressed bone was removed, the wound was closed by the ordinary method, and healed readily under cold water dressings. He improved rapidly, and for three months had no convulsions. The paralysis improved so much that he could walk where he desired comparatively well with the aid of a cane. mental condition also mended considerably; he was more cheerful than he had been for months, and it was thought his recovery would in a short time be complete. lapse of three months he began to get somewhat nervous and morose. His appetite decreased and paralysis increased; his melancholia began to be markedly observed; he was restless, though not inclined to walk much; was troubled with insomnia and complained of pain in his head at times quite severe. A marked change for the worse in his general condition was evident; this change came on rapidly. One morning, after waking from sleep, he was attacked with a very severe convulsion which lasted nearly two hours, from which he never rallied, but sank and died in three or four hours.

The autopsy revealed a very much contracted calibre of the trephine wound—it having filled up with new tissue. The old cicatrix of the brain membranes was hard and firm, slightly bulging and adherent to the skull around the wound. When it was incised, an abscess of the brain was revealed in which was found a small spicula of bone about half an inch in length; the brain tissue was softened and slightly discolored for perhaps a sixth of an inch around, extending into the cerebral tissue from the abscess cavity.

When this patient was trephined, if this cicatrix had been cut away, the part explored, the piece of bone removed, and the diseased brain scraped away, it is highly probable that his epilepsy, and perhaps his paralysis, might have been cured and his life prolonged.

Case II.—T. M., American, et. 24, male, farmer, fell from a tree, a distance of over twenty feet, striking his head upon a hard substance, and sustained a fracture of the skull; involving the frontal bone only of the left side near its junction with the parietal. According to what history could be obtained, he remained insensible for several hours, and he was confined to his bed for nearly three weeks. He gradu-

ally recovered, and in the fifth week after the accident, and after a day's labor of unusual severity, he was attacked with epilepsy followed by another seizure the day after; another occurred after an interval of two weeks, and then the convulsions recurred at irregular intervals for fifteen months, the attacks growing mose frequent and severe—any unusual mental and physical exertion bringing them on. tle benefit was obtained from internal treatment. His digestion was much disturbed by the large doses of bromides: he had a morbid appetite; his intellect was dull, and his case presented a gloomy prospect.

After about ten days' preparation he was trephined. Two buttons of bone were removed; a small piece ofthe internal table lying loose was also taken away. The wound was closed up and healed without trouble; he was confined to his bed ten days, and in fifteen days after the operation left his room. He seemed to be doing well until twenty-one days after the operation, when he had a mild epileptic at-

attack.

These attacks continued with variable frequency and severity for four months, when it was determined again to resort to operative procedure, which was accordingly done. A U-shaped incision was made, the flap turned back, and two buttons of bone were removed from the sides of the old A tense cicatrix of the dura mater presented, and was carefully removed entire. The brain beneath presented no perceptible pathological lesion. The wound was washed with warm carbolized water, the scalp dissected up for nearly an inch around the wound, the edges brought together with silk suture and closed up. The patient recovered without an untoward symptom, except that he had five or six mild spasms in the following three months, when they ceased altogether, and after five years (when heard from a few months ago) he had had no further trouble, but remained well and able to cultivate his farm.

These operations were not done under strict antiseptic rules, as the practice had not come into such general use as at the present day; but in the second case carbolized warm water was used.

This experience taught me that in all cases of trephining when the bone is removed, the part of the brain and membranes exposed should be carefully examined; and if a cicatrix exists, it should be removed, as also any foreign substance or a pathological lesion of the brain should be cut or scraped away under thorough antiseptic precautions. If hemorrhage occurs and continues after washing with hot water, and if the bleeding vessel or vessels cannot be ligated, the cavity can be very carefully and lightly packed with antiseptic wool, as is now taught, care being taken that the packing be not too tight, as the pressure thus made might result in mischief; and as soon as hemorrhage has been controlled, it should be removed.

It is not the pressure of the bone in every instance that causes the reflex disturbance, for the brain will sometimes become accustomed to this pressure if not too great, and its functions go on as before. But if the membranes have been lacerated at the time or sustained some other injury, followed by a circumscribed meningitis, a cicatrix will form, possibly adhesions, and some contraction take place. The cortical substance becomes irritated and convulsions are liable to ensue; or a circumscribed inflammation may extend to the brain and abscess result or a spicula of bone may be driven into the brain and its presence excite the disease. Therefore these sources of irritation should always be looked for and removed.

Mr. Horsley thinks that after a button is removed, if it is noticed that the dura mater bulges through the opening, it is an indication of the existence of pathological intercranial tension.

I believe, in all cases of epilepsy caused by depression from an accident, a contracted cicatrix of the scalp, or a sensitive spot in the head (as in a case that came under my observation some years ago which, by pressure upon a sensitive spot, would produce convulsions), trephining is not only justifiable, but demanded, and should be done without hesitation.

If the bone is thickened, Prof. Briggs'* teaching is correct—remove it. Trephine a second and a third time, if need be, taking away all the diseased bone, or even though it be not diseased, if there is much unnatural thickness, re-

^{*} International Encyclopædia of Surgery.

move it; and if any pathological condition of the membranes or the cerebrum be found, it should, without hesitation, be carefully cut away, leaving only healthy tissue, especially as regards the cortical substance; no tense thick cicatrix of the membranes should be allowed to remain. Even thick sensitive cicatrices of the scalp, in my opinion, should be removed if there be the slightest suspicion that the epilepsy is caused by the traumatism.

After these operations, the healing is materially assisted, and the subsequent danger lessened, by dissecting up the scalp for a few lines around the wound in the skull before it is brought together, in order not to have too much tension by cicatricial contraction. The wound should be carefully dressed by the antiseptic method; every source of supposed irritation removed, and, if possible, made to heal by first intention to prevent an extensive scar.

The general health should be looked after; the secretive function kept active, and the nervous system tranquilized. Keep the patient quiet and cheerful, away from all sources of excitement, from everything that would in any way affect the general health for several weeks after recovery seems

complete.

In my judgment, much of the success in many cases depends upon such proper attention to careful and judicious after-treatment.

In long-standing cases, improvement in the convulsions does not always begin at once. Sometimes several months elapse before the improvement is marked. The convulsive habit is gradually broken up, for there is a good deal in the habit the brain sometimes gets into with regard to these convulsions.

Many neurologists now think that "idiopathic epilepsy has its origin in the cortex of the cerebrum, and from a surgical stand-point it is therefore not difficult to understand that any chronic pseudo cranial lesion which affects this part of the brain can produce epilepsy."

Dr. N. Senn,* of Milwaukee, in his investigations, recognizes as causes of reflex epilepsy any affections or wounds

^{*} Annual Universal Medical Sciences, Vol. II, 88.

of the peripheral nerves which indirectly affect the cortex of the brain as well as lesions of the cortex itself.

It sometimes occurs that in trephining the skull for injuries or disease the surgeon is not careful enough in his exploration of the wound and fails to remove splinters of bone or other foreign substances which are liable to cause an inflammatory condition, and may produce epilepsy among other troubles.

Is it too much to hope that surgery may yet come to the aid of many epileptics who are otherwise considered incurable and doomed to a life of untold misery, whether their trouble be of traumatic origin or not?

Gorrespondence.

Dr. Rust on the Devil.

Mr. Editor: - In the last issue of your journal, Dr. M. A. Rust publishes an essay on the "Rise, Decline and Fall of the Devil," and concludes his paper by a flourish of his pen thus: "Devil and hell are gone, because of their incompatibility with the more humane sentiments of advanced culture. Their counterpart, heaven and immortality, will stand because of their harmony with our ideal wants; because at the present stage of brain evolution, man cannot afford to resign these most exalted aspirations." We infer that, at no very distant day, "heaven and immortality" will go too. If the subject was not a serious one we should be more amused than offended at the boldness of the writer. Shades of Bacon, Milton, Newton, Luther, defend us. Who is this "Daniel" that has "come to judgment?" Take from your shelves, all ye theological professors, and ye multitudes of D. D.'s, the heavy bound volumes of the great men of science, and commit them to the flames. Close all the cathedrals and churches in the land, and convert them into theatres and places of trade, for Dr. Rust, of Richmond, Va., has declared that there is no devil, no hell, and presently there will be no heaven. Much learning doth make thee

mad, most noble doctor. "The heavens declare the glory of God." "What house will ye build me? saith the Lord." "Heaven is my throne, and earth is my footstool. Hath not my hand made all these things."

Nay, saith the doctor, this is all a myth. I fear the doctor is better acquainted with the devil than with St. Paul. Paul says- "We have not followed cunningly devised fables." "We fight," says he, "not against flesh and blood only (these are a pretty good match for the doctor, we opine), but against principalities and powers, against spiritual wickedness in high places."

No, no, says Dr. Rust, though I must confess that you, Paul, know more about moral questions than all the Egyptian, Greek and Roman philosophers combined—that to you they are mere pigmies, only babbling babies, yet you do greatly err when you talk about "devils going about seeking whom they may devour." Though you write that marvellous 13th chapter of 1st Corinthians, which nineteen centuries have not yet fully comprehended, but we hope the "advanced culture" of coming ages and the higher "brain evolution," may understand and practice—though I say you did write that wonderful analysis of love, that holy, heavenly passion not of earth, you are certainly mistaken about the "devil, hell and heaven." Had I lived in your day, I would have taught you better. You say you have been to the "third," the "highest heaven," but I have been to Germany. Alas, alas, for human conceit and vanity. In this disease there is no cure but ridicule, and this sometimes fails.

It is possible that as this young Samson thinks that with his giant arms he has pulled down everything, he may imagine he can build up a grand system of religion and ethics. We beg that in the next issue of the Virginia Medical Monthly he will try his hand upon an essay entitled "A New System of Theology in Harmony with 'Advanced Thought' and Improved 'Brain Evolution,'" and that he be sure to get it copyrighted.

Original Translations.

From the German. By M. D. HOGE, Jr., M. D., Richmond, Va.

Idiopathic Hypertrophy of the Heart,

Bramwell and Peter, among the English and French pathologists, have denied that idiopathic hypertrophy of the heart exists as a separate disease, but recently Lennmalm brings forward a case of this sort as follows: A heavy drinker, of irregular mode of life, age 34, and a hard worker. was attacked, two months before his death, by apoplexy, followed by ædema of the lungs, palpitation of the heart, and great difficulty in breathing. In this case, hypertrophy was diagnosed before death as an independent disease, and the post-mortem examination showed a thickening of the left wall of the heart (20 mm.), valves and ostia healthy. disease appears to be relatively frequent in Norway and Sweden. The causes of the affection may be considered as excessive manual labor, venous palpitation, and misuse of alcoholics (Bollinger's "Munich beer-heart.") Its further course may be favorable or not, depending on the removal of the special cause.—(Upsala Läkareförenings, Bd. XXIII, Rundschau, Oct. 15, 1888.

The Most Important Bacteriological Discovery of 1887—The Tetanus Bacillus.

Dr. Carl Günther states (Deutsch. Med. Wochschr., 34, 1888—Rundschau, Oct 15, 1888) that the fact that tetanus was produced by a bacillus led Beumer to investigate the cause of tetanus neonatorum; and he found in the navel wound of a child eleven days old the characteristic tetanus bacillus, with which he successfully innoculated guinea-pigs, all of which promptly succumbed to tetanus. To produce this, the granulating navel-wound must show a superficial lesion. The practical deductions are only too apparent—the midwives must avoid all sources of contagion. Beumer has found the tetanus bacillus most universal, especially in large numbers in street-sweepings. Bonome found in the wounds of the injured by the walls of an old church in Turin, which was destroyed Feb. 23, 1887, by an earthquake, tetanus bacilli in great profusion.

Tuberculous Infection.

In a recent meeting of the Dresden local society, Dr.

Johne (Rundschau, Oct. 15, 1888) showed the lungs and intestines of a dog which had eaten a great quantity of sputa of a woman dying of phthisis, and had slept in the same bed with her for a long time. As spontaneous tuberculosis occurs very seldom in dogs, this was a case of peculiar interest. He related another case in which a healthy man, with good family history free from all lung taints, while dissecting a tuberculous cow, accidentally cut his finger near a joint. In this place a tuberculous nodule formed, and in a short while the man died of acute phthisis, as proved by the post-mortem examination.

Chronic Cocaine Poisoning.

Prof. H. Schulz reports (Med. Chir. Centralbl., 1888, 36—Rundschau, Oct. 15, 1888) a series of cases of chronic poisoning by cocaine, given in doses of from one-fiftieth to one-twentieth grain, for four months. The first indication was obstinate constipation, in several increased urinary secretion, with burning of the urethra; frequency of the pulse very marked, accompanied by palpitation of the heart and precardial anxiety. In the majority of cases there was severe and long-continued headache, followed by restless nights. In some, without any apparent cause, epistaxis.

Sulfonal in Mental Diseases.

Dr. A. Cramer (Berlin Klin. Wochenschr., 1888, 34—Rundschau, Oct. 15, 1888) made experiments in an insane asylum on patients suffering from melancholia, mania, paralysis, paranoia and hebephrenia. The four hundred and seven experiments were made on forty-five different individuals. In 92 per cent. sulfonal produced a sleep lasting five hours or longer; it came on in from one-quarter to one hour after the medicine was administered. The dose varied from 30 to 90 grains; no injurious effects were noted, and in only a few cases was there drowsiness the next morning.

Tumors Treated by Erysipelas.

Prof. Bruns (Centralb. f. Chir., 1888, 34—Rundschau, H.; XX) reports 22 cases of melano-sarcoma of the heart caused by infection of erysipelas; of five sarcomas, three were cured and the other two reduced in size by this means. Carcinoma and epithelioma were not benefitted. The curative effects of erysipelas were not only observed in malignant tumors, but also in chronic skin diseases, ulcers, syphilis, etc. Bruns concludes that the resorption of the fatty metamorphosis is produced by the fever.

From the French. By R. M. SLAUGHTER, M. D., Theological Seminary, Va.

True and False Anæmia,

Dr. Germain Sée has recently, in his lectures at the Hotel Dieu, devoted considerable time to the consideration of anæmia. (La Tribune Méd., Nos. 1052–'59.) He holds that anæmias are to be divided into two classes, the true anæmias and the pseudo-anæmias. The true anæmias are to be distinguished from the false by histological and chemical differences. The true anæmias are to be divided into three types—

1. Total anæmia, which is characterized by a diminution "en bloc" of all the elements of the blood, and is the result

of hemorrhage.

2. Chlorosis. This type of anemia is characterized by a functional defect in the hæmoglobine. There is no lessening in number of the globules, but a diminution of the reducent power of the hæmoglobine, an increase in the duration of the reduction of oxyhemoglobine, constituting a disease of evolution varying in its forms according to the age and sex of the patient.

3. The last type of the true anæmias is spontaneous anæmia. In this type, also called hypo-globulia, there is a dim-

inution of the hæmatics.

These three types embrace all cases of true anæmia, and outside of them there is no true anæmia. The so-called essential and pernicious anæmia, for example, the anæmia of miners, does not exist in reality. The condition here called anæmia appears to be due to parasites in the blood or to the presence of intestinal worms, particularly the bothriocephalus.

Of the false anemias there are an immense number, which may be divided into three groups. These false anemias give rise to paleness, weakness, migraine, gastric and nervous troubles and vascular murmurs, but are lacking in the characteristics of the true anemia, for there is no diminution of the blood elements "en bloc," lessening in the activity of reduction of oxyhemoglobine, nor diminution in the number of hæmatics. In the first group of the pseudoanemias are to be placed those suffering from inanition. This inanition is absolute, as in the case of those who eat too little; or relative, as in those who eat too much of one kind of food and too little of another, as little or no meat and a great quantity of starchy food; or any regimen not

so combined as to fulfill physiological indications. In this group are also to be placed those persons who suffer from gastric and intestinal troubles and do not properly digest and assimilate their food; and those who, from mechanical obstruction, as contraction of the esophagus, cannot take sufficient food. The class of subjects presenting the same blood changes are those cachectic persons suffering from metallic poisoning or virulent infections like malaria or tuberculosis and also those suffering from cancer.

The blood of this type of pseudo-anæmias shows a hypoglobulia always accompanied with small globules and hydræmia and slowness in the production of hæmatics without the mass of the blood failing to be equal to one-half the weight of the body and without the reducement power of the

hæmoglobine being increased.

The apneics are another class of this type, and are those who suffer from the want of sufficient fresh air. These are those persons who work in close rooms, and, although they may eat and digest well, nevertheless present the symptoms of so-called anæmia. It would be foolish to prescribe iron for these patients—their blood contains all necessary elements except oxygen.

The second type of the pseudo-anemias shows itself in those persons who are worn out by over-work, or over-indulgence in stimulants, or sexual excesses, and also those who are worn out by certain diseases, as fevers, diarrheas, albu-

minuria, dropsy, etc.

Dr. Sée protests against the too common use of the term neurasthenia, for in the so-called cases of neurasthenia it is often the stomach, often the muscular system, is at fault and

not always the nervous system.

The muscular system is at fault in those worn out by over-work, the nervous system in those worn out by excesses, and the secretory in those worn out by disease. A veritable exhaustion resulting from loss of albumen is to be found in cases of albuminuria or dropsy, in certain forms of diarrhea, and in purulent affections. In the acute febrile consumptions, the primordially recognized element among the many others is inanition, and, finally, as regards the blood, the loss of albumen is accompanied by hypoglobulia and other hæmatological lesions which are, however, more or less promptly reparable, and which belong, by reason of their characteristics, to anæmias proper.

The third type of the pseudo-anæmias includes those of toxic origin. In these cases the blood is charged with poi-

sons, metallic, miasmatic, or specific, or virulent, as the case

may be.

This class includes cooks, workmen in poisonous vapors of both organic and inorganic nature, miners, cases of slow poisoning by various metals, etc. Under the virulent poisons, Dr. Sée places syphilis, scrofula, tuberculosis, cancer, and suppurative diseases. The specific or miasmatic poisonings are those of malarial origin. All these various kinds of poison produce paleness and other symptoms of true anæmia, but the blood alterations are not those of anæmia.

Prof. Sée concludes from his studies that iron is not to be given indiscriminately to all pale patients. It is of no value in many cases of pseudo-anemia. Iron should be given only in those cases where hæmatoscopic examination shows plainly the need of it. In those cases in which it is not needed it will only cause digestive derangements.

The proper treatment for the anæmic symptoms in all cases of pseudo-anæmias will be to correct the errors of diet, to remove the cause, whatever it may be, or to apply the

proper remedial treatment.

Treatment of Measles.

Dr. A. Montefresco, of Naples, gives (Arch. de Path. Infant) as follows the result of his observations during the recent epidemic of measles. He opposes the use of antipyretics, as in most cases they are useless They should be reserved for those cases in which the temperature is so high as to threaten to lead to degeneration of tissue, to myocarditis, or brain troubles. Diet is of considerable importance. He recommends, above all, glycerine, which he thinks preferable to alcohol, and better also to sustain the strength of the patient, as it does, by diminishing the excretion of urea and by lowering temperature. He prescribes it in form of a lemonade and in daily quantities of one-half to one ounce. For the broncho-pneumonia the most common and serious complication, he gives infusion of ipecac. To this powerful expectorant he adds tincture of aconite to diminish cough. In the capillary bronchitis of measles he advises iodide of sodium in doses of 7½ grains, which combined, with sodium bromide regulates the rhythm of respiration, lessens the bronchial obstruction, and diminishes the frequency of the cough—Le Practicien, Dec. 3, 1883.

The Treatment of Oxaluria.

In a communication to the Société Médico-Pratique (Rev.

de Therap.), Dr. Picard advises that to combat the formation of oxalate of lime, and to prevent the consequent loss of lime-salts, and the formation of urinary calculi, it is necessary to avoid those foods which contain or may give rise to the formation of oxalates, such as sorrel, cresses, tomatoes, rhubard, and the fruits rich in citric, tartaric and malic acids, especially apples and currants. Champagne and Moselle wine, and strong beer, are to be strictly abstained from. In their stead, cognac, whiskey and gin are to be preferred. Hard waters are to be avoided, but if used of necessity, should be boiled. The medicinal treatment should consist in the administration of potassium, sodium, alkaline phosphates, and food rich in phosphates such as fish-roe, calf and mutton brains. If there is acidity of the alimentary canal, carbonate of magnesia should be prescribed. In this case, also, may be advised nitrate of potash, chlorhydric acid, in doses of 20 drops two or three times a day, or a mixture of chlorhydric and nitric acids.

R. Acid hydrochloric.

 Acid nitrie
 āā 3iv

 Water
 3iss

 Orange syrup
 3iv. M.

 S. One teaspoonful in a glass of water before each meal.

Patient should eat moderately, avoid damp air and depressing influences. He should take active exercise in the open air, and such gymnastic exercises as will increase respiration and muscular development. He should take salt baths and sea voyages. All these tend to change oxalic into carbonic acid through the absorption of a greater quantity of oxygen. He should drink freely of warm aromatic drinks and of milk and avoid sugar. Infusions of calumba and hops are good, as are also Vals and Vichy waters. Patients should retire and rise early.—Le Praticien, Dec. 3, 1888.

Proceedings of Societies, Boards, etc.

SOUTHERN SURGICAL AND GYNÆCOLOGICAL ASSOCIATION.

FIRST DAY—TUESDAY—DECEMBER 4, 1888.

The First Annual Session of this Association convened in the parlor of the Young Men's Christian Association in Birmingham, Ala., at 10 A. M. The Convention for organization of the Association was held about a year ago, and elected Dr. W. D. Haggard, Professor of Gynæcology, etc., University of Tennessee, Nashville, Tenn., President, who presided during this session. The orginally appointed time was in September of 1888, but the epidemic of yellow fever in Florida during the summer, which seemed to threaten other portions of the South at one time, caused the postponement until December 4th. Under the efficient energy and influence chiefly of the best Medical Society Secretary in the United States, Dr. W. E. B. Davis, of Birmingham, Ala., the postponement was effected, and the present session was convened and conducted without confusion and with

the most perfect satisfaction to every one interested.

After prayer by Rev. D. I. Purser, D. D., and the Address of Welcome by Hon. A. O. Lane, Mayor of Birmingham, the President announced the following as the *Judicial Council* for the present session: Drs. J. M. Taylor, of Corinth, Miss.; W. B. Rogers, of Memphis, Tenn.; Virgil O. Hardon, of Atlanta, Ga.; Wm. H. Wathen, of Louisville, Ky., and W. E. B. Davis, of Birmingham, Ala. A requirement of the Constitution is that all motions, etc., are to be referred to this Council, (without debate before the Association), and decided on and the decision reported back to the Association, thus avoiding much "wrangling and vain dispute" during the sessions.

We summarize the work done by this Council during the session without specific mention as to the time when the

subjects were introduced before the Association.

Dr. Bedford Brown, of Alexandria, Va., introduced a resolution looking to the limitation of membership to one hundred. After a great deal of consideration and discussion, the Council decided that it would not be wise to limit the membership to any specific number; but that the chief result aimed at could be attained in another and better way. This way is to have the standard of requirements for membership fixed so high that only good men can secure admission. Hereafter every applicant for membership must be endorsed by two members, present an original paper on some scientific subject connected with surgery or gynæcology, which must be satisfactory to the Judicial Council, and then the Council has to be satisfied of the moral, social and professional standing of the applicant before it recommends him to the Association. This method of admission, it is believed, will secure the very best material for the Association, of which there is a great abundance yet to join.

The annual dues of each member is still fixed a \$10.

The having an *annual oration* by some member was abolished so as to give more time to the reading and discussion of papers.

All entertainments which had been arranged for this Association had to be declined, owing to the great amount of

scientific work on the programe.

Papers were contributed from members residing in ten different States, and other States were ably represented in the discussions.

The Officers and Committees-elect for the ensuing term are

as follows:

President.—Dr. Hunter McGuire, Richmond, Va.

Vice-Presidents.—Dr. W. O. Roberts, Louisville, Ky., and Dr. Bedford Brown, Alexandria, Va.

Secretary.—Dr. W. E. B. Davis, Birmingham, Ala. Treasurer.—Dr. H. P. Cochran, Birmingham, Ala.

Judicial Council.—Drs. Jno. S. Cain, Nashville, Tenn.; W. T. Briggs, Nashville, Tenn.; J. M. Taylor, Corinth, Miss.; DeSaussure Ford, Augusta, Ga, and V. O. Hardon, Atlanta, Ga.

Publication Committee.—Drs. W. E. B. Davis, Birmingham, Ala.; W. B. Rogers, Memphis, Tenn., and V. O. Hardon, Atlanta, Ga.

The next meeting will be held in Nashville on the 2d Tues-

day in November, 1889.

Dr. Duncan Eve was appointed Chairman of the Commit-

tee of Arrangements.

Dr. McGuire was not present, but accepted the Presidency, and expresses the desire to do all in his power for the in-

terests of the organization.

It would be difficult to give an abstract of the *President's Address*, by Dr. W. D. Haggard, of Nashville, Tenn. It was only intended to excite a little enthusiasm and interest in the scientific work of the Association, which it did most effectually—although it took up only fifteen minutes in its delivery.

Dr. W. B. Rogers, of Memphis, Tenn., Professor of Sur-

gery in the Memphis College, then read a paper on

Gastrostomy.

At the same time he reported a case in which he had performed the operation successfully for cicatricial stricture of the œsophagus; location, $7\frac{1}{2}$ inches from the incisor teeth. The patient was a male—white, 24 years of age, and the contraction was due to swallowing a solution of concentrated lye one year previous to the operation. The patient's health

was steadily on the decline from starvation. The contraction was so great that though repeated examinations were made, urethral bougies of the smallest size could not be made to enter the stomach. The operation was performed June 29, 1888; time of operation, I hour and 10 minutes. Fenger's incision was followed. The stomach was fixed in the abdominal wound by means of hare-lip pins, and additionally secured by silk sutures. Morphia, hypodermically, was used to control nausea. The pins were removed in four days; the sutures on the fifth and sixth days. Opening into the stomach was made on the tenth day. Patient was supported during this period by rectal enemata, as well as by milk given per orem. Temperature did not exceed 100° F. Fifteen weeks after operation, the patient had fully regained his flesh and strength, and was able to swallow solid food. The patient being present, Dr. Rogers demonstrated the method adopted for feeding him through the silver tube passed through the incision in his stomach.

All speak of it as "an able and well written paper," and

elicited a good discussion.

Dr. Virgil O. Hardon, of Atlanta, Professor of Diseases of Women, etc., Atlanta Medical 'College, read a paper (of which we can only furnish a resumé of the points made) on Chronic Pelvic Cellulitis and the Conditions Which Simulate It.

Chronic pelvic cellulitis never occurs as a distinct disease, but is simply the last stage of acute pelvic cellulitis. When seen in its first stage acute pelvic cellulitis may be aborted by aspiration of the diseased tissues, and thus the stage of so-called chronic pelvic cellulitis may be prevented.

The conditions which are mistaken for chronic pelvic cellulitis are: (1.) Distention of the pelvic venous sinuses due to obstruction of the circulation from prolapse of the womb. (2.) Distention of the Fallopian tubes by pus, serum or blood. This condition may, or may not, be complicated by repeated attacks of acute pelvic cellulitis. Acute pelvic cellulitis is not always a secondary affection, as claimed by some authorities, since the writer has found in some cases where the disease was aborted by aspiration, that the pelvic organs were free from disease. (3.) Spasmodic contraction of the utero socrol ligaments. The spasmodic character of this condition is proven by the fact that it disappears when the patient is etherized, and no organic changes are found after death to correspond to the condition existing during life.

. In contrasting the pathological condition advocated b

Emmet and Tait, he at length reached the conclusion that probably the true ground lays between the extreme views of these two gentlemen. This paper is spoken of as "remarkable for its clear and lucid description of the different posi-

tions held, and was ably discussed."

While Dr. T. O. Summers, of Jacksonville, Fla., was unable to attend the session on account of the epidemic of the yellow fever in his community, he has kindly forwarded us his paper on "Indications for Operative Interference in Cerebral Troubles," which we have adopted as Article II. under the head of "Original Communications" in this issue of the Virginia Medical Monthly.

Antiseptic Surgery in Country Practice.

Dr. J. M. Taylor, of Corinth, Miss., Ex-President of the Mississippi State Medical Association, of the Mississippi State Board of Health, etc., in his preliminary remarks, assumed that the membership of the Association would be largely composed of general or country practitioners, men who can afford neither time nor money for non-essentials in theory or in practice. Such men are of necessity rigidly practical. He assumes that the requirements of antiseptic surgery are too extravagant and impracticable for that class of practitioners; that the full details can be carried out only in hospitals, and in the houses of the more wealthy classes.

He defines the term antiseptic practice, as commonly used, by the single word bacteriopathy, and objects to the latitudinous definition which would make it apply to all means used to counteract and to prevent sepsis from any and every source. It includes only such means as may be used to destroy and to prevent the living organisms assumed to be the causes of the various diseases in which they are found. He affirms that the medical profession has been, in all ages, dominated by theories, many of which have proved to be false in toto, while others have been made up of false facts, in a large degree; and that many of the greatest minds in the profession in every age have been wasted in the vain pursuit and defence of some imaginary discovery. Paracelsus, in the sixteenth century, discovered tartar as the cause of all diseases. Hahnemann, the founder of homeopathy, discovered that all the maladies which afflict mankind, epidemic, sporadic, idiopathic, and symptomatic, spring from three original diseases, viz: syphilis, sychosis, and the itch. Thompson discovered that all diseases originate from cold, and that heat and heating remedies supply a panacea for them all. Now we have the germ theory, which teaches

that all diseases originate from specific germs or living organisms, a most beautiful theory, and supplies a desideratum in etiology long felt in the profession. It furnishes an easy solution to many questions that have greatly perplexed the medical profession for many generations. On its promulgation, the prolific brain of the discoverer, ever on the alert for something new, was set to work to devise some means of killing these microbes, which, like the giants that existed in Don Quixote's imagination, were the cause of all the miseries and all the woes of mankind. And, Minervalike, antiseptic surgery, in full panoply, sprang into existence, and carried the medical profession by storm, with all its boasted modern advancements. Carbolic acid long stood at the head of the list of germicides. It is possible this agent has caused the loss of more lives than the microbes it was intended to kill. Bichloride of mercury is all the fashion now, having supplanted carbolic acid to a great extent. is a most virulent poison, and to be at all safe must be diluted to homeopathic proportions. If strong enough to be

relied on as a germicide, it is not safe.

The writer asserts that the medical profession is not yet freed from the superstition and credulity which have always prevailed in it: that we are still liable to be captivated and led astray by the plausible deductions and legitimate conclusions drawn from false premises by enthusiastic discoverers. He claims that it is not proved that bacteriopathy is any more true or practically useful than homeopathy, allopathy, or hydropathy; that false and absurd as these may be in theory and in fact, they have accomplished good results in practice; but if antiseptic surgery should accomplish nothing more than to demonstrate the great advantages of absolute cleanliness, it will have accomplished incalculable good. It will not be the first instance in which chimerical studies have developed grand results not anticipated. For instance, astronomy is the child of astrology, and modern chemistry is the outgrowth of alchemy. He would not underrate the labors and investigations of Pasteur, Klebs, Koch, Tyndall, Cohn, Cohnheim, Virchow, and others in Europe and America engaged in similar work. He confidently expects important results from their labors, whether the germ theory be established or not. But he contends that any system of practice founded on a theory not yet proved to be true is premature, and cannot stand the tests of time. He grants that the frequent presence of bacteria, or other micro-organisms in disease processes, is generally admitted,

and seems to be easily demonstrated; but their functions or

relations to these processes are not understood.

The theory of their presence as etiological factors is opposed by the hypothetical doctrine of their incidental or accidental presence as natural scavengers for the consumption of effete matter. Bacteria or micrococci have been found in great quantities on the mucous membranes, in the blood and in the fecal discharges of healthy persons. They have been found under Lister's antiseptic dressing, without suppuration following. It is asserted, furthermore, that suppuration can be produced without the presence of minute organism of any kind. It is assumed from high authority that all the effects usually attributed to germs may be caused by the toxic action of the soil in which they have existed.

Reference was made to the subject of ptomaines and leucomaines, now engaging some of the ablest chemists and biologists in the world. If the researches of Gautier, of Brieger, and others engaged in their study should verify their etiological importance, and if the claims of bacteriologists should be established, our profession will be completely revolutionized, and all our present systems of etiology, pathology and therapeutics will be supplanted. But however much we may boast of our superior attainments and enlightenment, it is not at all probable that we are so far superior to our ancestors as to warrant any such expectations. It is a fact, he suggests, that every generation has considered itself much smarter than its predecessors, yet "history mere-

ly repeats itself."

In conclusion, he admits that it is a fact undenied, and probably undeniable, that the mortality from wounds and surgical operations, especially in hospital practice, has been greatly reduced since the introduction of antisepticism; but he suggests it as a significant fact that the very highest degree of success has been achieved by surgeons who do not use the antiseptic methods. This, he claims, is not due to accidental or fortuitous circumstances. Surgeons of equal qualifications have operated at the same time, in the same hospitals, one with and the other without all the rules of antisepticism, with equal success. He ventures the assertion that the qualified general or country practitioner, who uses no antiseptics per se, can boast a degree of success equal to that of the most distinguished specialist with all the antiseptic appliances most rigidly enforced. Chief among the causes of this decreased mortality is the increased import-

ance attached of late to cleanliness, and to minute details in operations and in treatment. Ever since the Mosaic laws were promulgated, filth as a factor in disease has been more or less appreciated in all civilized countries. The fact is established and admitted by everybody; but, like many other facts in medicine, it is empirical; its modus operandi is not as yet understood. Great harm has been done to the profession by the crude philosophy and hasty conclusions of pseudo-scientists, which constitute the great bulk of our literature on this subject. He cautions his country brethren to beware of hasty and imperfect conclusions. Wait until all doubts and uncertainties have been removed by those who alone can do it. Avoid the growing spirit of reckless experimentation. In the meantime, stick to those means and methods which have given success to our fathers, and which have enabled us to achieve results which can compare with pride and confidence with the best of them. would not reject anything because it is new, but would not adopt it merely because it is plausible.

With reference to this paper, it is said that "the positions taken by the author were well sustained; but the discussion, which was lively and pointed, left the author unable

to reply."

Dr. Bedford Brown, of Alexandria, Va., Ex-President and Resident Honorary Fellow of the Medical Society of Virginia, etc., read a paper on

Tumors of the Uterus.

He stated that in a medical practice extending over a period of nearly forty years, twenty-seven cases of fibroid tumor of the uterus had come under his observation. A portion (about one-fourth) remained under his care from one to two years; another portion, eight or ten years; while still another portion (nearly a third) have been under his

inspection from twelve to fifteen years.

In these twenty-seven cases are included all descriptions of cases, from the most aggravated type, with repeated and alarming hæmorrhages, septicæmia, peritoneal inflammation, hectic fever, excessive constitutional impairment, to those in which the original health of the parties was unimpaired. Notwithstanding the aggravated character of many of the cases coming under his treatment, he has yet to witness the death of a woman from fibroid. On the contrary, all have improved, and a considerable proportion have so far recovered that scarcely a vestige of the disease was left.

Hence the results of his personal observation teach him that all of these cases of fibroid can be materially benefitted by medical treatment, and quite a considerable proportion may be relieved. In a considerable number of these cases, not at the earliest nor at the later stage of submucous growth, when the tumor began to expand the uterine body and obliterate the cervix as in pregnancy from mechanical pressure on the venous circulation, causing obstruction. there was marked ædema of the cervix produced, the cervix becoming pale, livid, with tortuous veins, and when indented a decided pit remained from pressure, as in anasarca, for some time. In three cases the cervix was large—at least two inches in diameter-and puffy to the touch, or rather imparted a doughy sensation. Edema often continued for more than twelve months, until the completion of the expansion and dilatation of the cervix from fibroid growth, when the os imparted the sensation to the touch of a cartilaginous ring. At this stage the tumor presses down the vagina and causes a remarkable shortening of that canal, until often it is reduced to an inch or an inch and a half in length. As absorption and reduction progress there is a reversal of these processes, the vagina becoming longer and the cervix becomes elongated, returning to its original form and character.

The first two cases of fibroid treated by Dr. Brown came under his care about thirty-five years ago. They were of the negro race, and had borne children, and continued at that time to menstruate. To control the hæmorrhage in both cases ergot was used. For the purpose of arresting and producing absorption of the growths, which were submucous in these cases, the liquor arsenici et hydrargyri iodidi, in one- and two-drop doses three times a day, was administered in both cases for a period of three or four years at brief intervals. In the worst of the two cases the tumor was ultimately absorbed. In the other there was partial reduction before and final recovery after the menopause. Subsequent experiments with the same remedy in similar cases were not so successful. He has tried also Prof. Simpson's bromide treatment, but without benefit. He has also tested the treatment introduced by Hildebrandt. He does not regard that as any better than the internal treatment of ergot, while it is much more painful. The continuous and regular internal administration of ergotine in one- or two-grain doses, strychnine in fortieth of a grain, arsenious acid the twentieth of a grain, and sulphate quinine

in one-grain doses, three times a day, maintained for many months, and even years, has in his experience certainly succeded in retarding fibroid growth and promoting to a certain extent absorption by acting on the calibre of the nutrient vessels of the uterus. For the control of hæmorrhage he has formed the normal liquid ergot of Parke, Davis & Co. a very prompt and active preparation, administered hypodermically. At the same time it does not cause irritation. But at an advanced stage of fibroid growth, when the uterine walls become thin and attenuated, the muscular fibres become paralyzed from over-distension, ergot fails to exercise influence either in controlling hæmorrhage or promoting absorption. In this class of cases he has found the fluid extract of hydrastis canadensis and the fluid extract of phytolacca decandra, in doses of twenty drops each three times daily, to exert a favorable effect. Both of these therapeutic agents manifestly exert an influence over that circle of organic system of nerves distributed to the sexual system, embracing the ovaries, uterus, and mammary glands. Their tendency is to repress inordinate action of the sexual neryous system and to regulate the circulation to those organs. Hence their action in lessening fibroid growth and mammary engorgement. The hydrastis, while in his experience it does not come up to its vaunted reputation by some as a means of promoting reduction and absorption of fibroid growth, does accomplish that object to a limited extent. He thinks it acts better when combined with the phytolacca.

All the medical treatments of fibroids proving rather unsatisfactory, Dr. Brown, some nine years since, instituted a series of experiments in four cases then under his charge. The object was to secure some agent which would exert a potent effect on the blood formation, and thereby regulate the process of nutrition and the metamorphosis of tissue, reestablishing the lost equilibrium of tissue-renewal and disintegration, and in that way repressing the enormously increased cell proliferation at work in tumor-building. The most certain and potent agent in his knowledge to effect these purposes were comprised in those preparations combining phosphorus, lime and soda, and found in the syrup of the lacto-phosphate of lime and the pure hypophosphites of lime and soda. In experimenting with these articles he found that their primary effect in cases with inordinate tendency to hæmorrhage was to repress that tendency, and in two cases absolutely to cause suppression of menstruation. At one time both of these patients refused to take the rem-

edy, as they thought it would unsex them.

There have been nine cases treated principally by means of the phosphates. Three of these cases are virtually well. These cases were all of the most serious character. were the most serious that ever came under his charge, being characterized by enormous growths, subperitoneal and submucous, repeated and most dangerous hæmorrhages, peritoneal inflammation, at times symptoms of septicæmia, and great constitutional prostration. In these cases scarcely a rudiment of the original disease can be detected, and the local and general health of the patients is good. In all the other cases there has been a marked improvement in every particular. Another advantage of these preparations is their admirable influence in restoring the general health and thus preventing that fearful wear and tear arising from the effect of these growths. His method of giving the phosphates is a drachm of the syrup of lacto-phosphate three times a day, and also a drachm of the McArthur syrup of hypophosphites of lime and soda three times a day. As a further illustration of the marvellous effects of the phosphate treatment in regulating unbalanced nutrition and thereby correcting local disease resulting therefrom, Dr. Brown cites four cases of severe and dangerous adenitis treated alone by this means. Two of these cases, in which the ædema and swelling of the tissues of the neck and throat were great from adenitis of the cervical glands, attended with alarming constitutional symptoms following scarlatina, one resulting from an attack of malignant measles and another from the effects of cold in a strumous constitution. All of these cases were exceedingly grave in type and threatened life itself. In all, the pulse rate was frequent, the temperature high, and the general prostration excessive. All were subjected to the phosphate treatment, and it was tested as a means of arresting acute glandular inflammation and promoting absorption of the morbid products thoroughly. The syrup of the lacto-phosphate of lime was given in thirty-drop doses three times daily, and Mc-Arthur's syrup of the hypophosphites of lime and soda in from fifteen- to thirty-drop doses every two or three hours. In all these cases improvement commenced in from twentyfour to forty-eight hours, and all were relieved in from eight to ten days, with complete absorption of all inflammatory products and without terminating in suppuration.

Dr. Brown regards this as a fair example of the action of these agents on the glandular system in correcting malnutrition, and thereby the lesions resulting from this causeregulating the circulation by improving the formation of the blood and preventing suppuration. When it is desired to arrest inordinate tissue deposition in a locality, or morbid exudation, and to promote absorption, the writer thinks that the system should be saturated with the phosphates of lime and soda speedily and promptly. He regards local treatment of fibroid tumors as an adjuvant of value in their management. His method is to apply in the os uteri, over the entire cervix and roof of the vagina, the Churchill tincture of iodine and the normal liquid ergot, or the fluid extract, alternately, every third or fourth day, freely and thoroughly. He feels sure that these agents are promptly absorbed in this way and exert their specific influence on the structures of the uterus, as the iodine can be speedily tasted by the patient, and the uterus not unfrequently responds to the action of the ergot as indicated by uterine pain. Hence this local treatment becomes a means to retard fibroid growths and facilitate absorption.

Dr. Brown feels safe in asserting that by a combination of these various therapeutic agents, judiciously and timely applied, benefit of a decided character will be afforded to all cases and positive relief to a considerable proportion.

"This paper detailed reports of a large number of cases of fibroid tumors of the uterus successfully treated by general medication. It was well received and elicited a general discussion."

Dr. F. T. Meriwether, of Asheville, N. C., Surgeon to Mission Hospital, etc., read a paper on

Aphorisms in Aseptic and Antiseptic Surgery and Gynecology.

In presenting the pathology of suppuration he stated that suppuration is not caused by bacteria directly, but by alkaloidal ptomaines; but that the action of these ptomaines is favored and increased by bacterial metabolism, forming other ptomaines. These ptomaines act on the tissues primarily as an irritant, causing an exaggeration of nutrition, exudation, and pus formation. In the treatment of wounds, we use antiseptic dressings, not so much to the wound itself as to the discharges and to the surrounding skin; for if we leave a wound aseptic and apply proper dressings we cannot have suppuration. He advocates the use of heat, bichloride of mercury, carbolic acid, and iodoform, as antiseptics, the last as much for its absorbent as antiseptic properties. He thinks that many surgeons are kept from antiseptic practice because they do not understand it thoroughly, and link the

thought of it with costly apparatus, atomizers, etc. The country practitioner may practice antiseptics as well as his city brother, it requiring nothing but what may be carried in his saddle-bags, asepsis, and therefore antisepsis implies at the first attention to detail, and unless this is given, the surgeon and gynecologist will fail in its practice.

Dr. F. T. Meriwether, of Asheville, N. C., also read a report of a case of

Aortic Aneurism Involving the Innominate Artery Cured by Ligation of the Common Carotid and Subclavian.

October 24th, 1888.-Mrs. P., age 37 years, married, multipara, last child about 3 years of age; worked at a loom in a cotton mill; no history of syphilis as far back as third generation. Her two aunts, two uncles, and grandmother, on her mother's side, had died suddenly from some heart lesion. Her father had died from acute tuberculosis. Patient had had a slight cough for some time, and for last few weeks had suffered from asthma at night. For past six or eight months she had been much annoved by a buzzing and burning in her right ear, and for past few weeks had noticed a stiffness and some tenderness in right cervical region. She had had more or less pain in upper thorax for a year or more, but on October 19th, 1888, upon walking up a steep hill, she felt something give way, and was seized with a sharp pain in her chest, just over the third left costo-sternal articulation, and had shortness of breath. After reaching home, upon moving around or getting up, she felt sick and her heart palpitated.

On inspection in dorsal position, a slight pulsation was visible at base of the neck, just above the sternum. When sitting up, the pulsation disappeared, and could not be seen anywhere. Palpation revealed a thrill and pulsation over the upper portion of the thorax, most distinct in second right costal interspace, but it was felt over a space of three and a half or four inches in diameter, and was transmitted a short distance along the subclavian and carotid upon the right side. Percussion gave slight dulness over upper part of sternum over a space of two inches in diameter, extending from about one inch below the superior extremity of sternum. Slight tenderness over the space was remarked, but no softening—auscultation gave a well marked aneurismal bruit heard with the greatest distinctness in second right costal interspace close to the sternum, but heard quite distinctly along the subclavians and carotids. Radial pulse

not impaired, being apparently synchronous. There was some little laryngeal irritation. Pupil of right eye was slightly contracted, and there was some little dimness of sight on that side. Drummond's sign of a systolic puffing upon stethoscopic auscultation over trachea proved of no value in this case. An apparent puffing was noted, but, upon careful examination, it was found to be produced by the obscuring of the tracheal respiration by the loud bruit, thus giving an apparent intermittency in respiration. It is possible, however, that in a larger aneurism, and in a different position, more or less stonosis of the trachea might be produced, and in that way give rise to an apparent puffing. Diagnosed aneurism of the ascending portion of the aorta.

Dr. Meriwether put her upon potassium iodide and tincture of digitalis, the action of the heart being so tumultuous and irregular; limited her diet and tried to follow Tiefnell's method.

October 28th.—Upon more careful auscultation, mitral regurgitant and aortic stenotic murmurs were heard, the first being transmitted over the area common to aortic stenosis.

October 29th.—She spat some blood, but it was probably from a laryngeal or tracheal irritation. But she complained of pain in her back, deafness in right ear, and slight pain and difficulty in swallowing. The pulsation was quite apparent at root of the neck, and felt along the carotids and subclavian for some distance. The action of the heart was regular, and she suffered from no palpitation, but had several attacks of asthma. Right pupil more contracted, and right radial pulse a little weak and a little later than the left.

November 2d.—Finding the aneurism apparently increasing, the doctor decided upon operation. There was a dullness over some three and a half inches of diameter not well marked except over sternum. The radial pulse was quite perceptibly affected, and involvement of the innominate ar-

terv was probable.

November 3d.—He operated at Mission Hospital in his city, assisted by the staff. Chloroform was given, but she took it so badly, failure of respiration repeatedly recurring, that he substituted ether. He intended to tie the common carotid just above the omo-hyoid, but it being placed higher in the neck than usual, he came upon the carotid nearly half an inch below where it crosses. The vessel was exposed by drawing the sterno-mastoid muscle outwardly and the

sterno-hvoid inwardly, thus exposing the artery nicely. The descendens noni was just upon the artery, but was held aside while the ligature was passed from within out. The internal jugular was not seen. Catgut was used to ligate. The subclavian was tied in its third portion just outside of the scalenus anticus. It was placed quite deep in its bed here, and had to be raised some little distance before the ligature could be tied. The external jugular vein and a network of small veins crossed the middle of the incision, but by careful working none were cut. The jugular was dissected out and drawn to the inner side of the incision. The tracheal plexus was not seen, nor was anything of importance except the artery. No blood was lost during the operation. The incisions were closed with very light catgut and iodoform, and iodoform gauze was used as a dressing. Antisepsis was strictly observed. Time of operation; hour and a half. Patient rallied well from operation, but suffered great nausea during the night.

At 9 A. M., on November 4th, the patient was easy, but felt a little heaviness in right arm. Circulation good, and well established; pulse in left arm a little increased; a distinct pulsation is felt over abdominal aorta upon palpation.

Pulse, 100; temperature, normal.

November 5th.—Some appetite, and feeling comfortable.

There was no rise of temperature during the entire period. and the pulse on the third day went down to 80; on the fourth day, a small abscess formed at the root of the lower right canine tooth and ruptured, the tooth being decayed. Not a bad symptom appeared—no signs of anæmia—the only thing complained of being a little weakness in the right arm. All the subjective symptoms present before the operation had disappeared. The dressing was taken off on the tenth day, and everything found united. No sign of pus, the dressing not even being stained. The pulsation had diminished somewhat, and from this time on got less and The patient got out of bed upon the twelfth day, and left the hospital on the seventeenth day after operation. She was ordered a syrup of the hypophosphites, and she gained strength daily. Nineteen days after the operation the pulsation could hardly be felt, and then only by deep, firm, digital pressure in the supra-sternal fossa. No thrill present.

On the twenty-seventh day after operation no pulsation could be felt, but a slight systolic bruit could still be heard over ascending aorta, being confused and lost in the aortic stenotic murmur. The abdominal pulsation had disap-

peared, and the only thing abnormal was a slight increase in the pulsation of the left carotid, that being a compensative hypertrophy and dilatation. Discharged as cured with directions to report every month or two, or upon anything

abnormal happening.

The statistics of this operation are in some confusion, owing to several divisions made by different writers. Dr. J. A. Wyeth claims to be the second to operate upon aneurism of the ascending aorta. Dr. Meriwether's case, then, is the third of its kind. The first case died. Wyeth's case is reported as a cure, but died in one year from diarrhœa. Dr. Meriwether's is, then, the second cure. Gross, however, gives six cases, beginning with Bickersteth, in 1864, and ending with Palmer, in 1880, to which Wyeth's and the present case are to be added, making eight cases.

This operation is practically in its infancy, the great mortality being due to delay in operation. So it has been with all operations, the results getting better the earlier we operate. Very few patients are willing to go to bed for two or three years conceding that the iodide of potash treatment is of service. If taken in time, hope may be given patients of a cure, with but little risk, by this operation. It should not be undertaken by one faulty in his anatomy, or in his sur-

gery, and antisepsis must be thoroughly carried out.

Only an hour's recess was taken about midday. Then the Association was in a continuous interested session until after dark. At night the members spent the evening at the O'Brien Opera House, where Dr. W. F. Hyer, of Meridian, Miss., delivered the Annual Oration to a crowded audience on "The Relations of the Physician and Patient." While replete with humor, the address was full of sound suggestions After the address, the Mendelshon Club gave an enjoyable concert entertainment, which lasted till near midnight.

Second Day—Wednesday—December 5.

Instead of the report of the case of "floating kidney with vicarious menstruation," announced in the printed programme of this session, Dr. De Saussure Ford, of Augusta, Ga., formerly Professor of Anatomy in Medical Department of University of Georgia, read a paper on

Cranial Surgery.

He remarks that it has been demonstrated by many surgeons that it is not so dangerous to use the trephine as was formerly thought, and that death does not necessarily follow the loss of a part of the cerebral material. In 1861, he re-

ported the case of a man who was struck by a rock, which comminuted the left lateral half of the frontal bone, and compressed the brain, requiring him to use the trephine in two places. The membranes were also discovered to be torn, and he removed two tablespoonfuls of brain substance. The man recovered without any trouble, more than slight suppuration for a week or ten days, and has been ever since a perfectly sound man, without any brain aberration of any kind.

Recently the doctor has removed a part of the occipital bone, including the groove for the right lateral sinus, which was not injured—which pieces he exhibited. The case was this:

September 6th, 1888.—W. S., German boy 9 years old, sustained comminuted fracture of the left leg, middle third, and comminuted fracture of the left side of the occipital bone, by being thrown from the railroad track by the cowcatcher of an engine. Dr. Ford saw him an hour after the injury; but the boy had not reacted, was unconscious, with pupils contracted, and pulse small and frequent. The doctor put up the leg in felt splints temporarily. There was a small lacerated wound of the scalp, admitting the end of the little finger, which revealed fracture. A flap in the scalp, including the pericranium, leaving the wound in its centre, was dissected up, disclosing the character of fracture. A considerable extent of the groove for the left lateral sinus was taken from the skull. Ordinary antisepsis was used parts irrigated with 3000 th bichloride of mercury solution, and instruments taken from carbolic acid solution: but Dr. Ford teased the lateral sinus out of the groove with his finger nail, which had not been toiletted by nail-brush or pen-There was no wound in the dura mater. The flap was sutured with ordinary silk; no drainage tube was used; wound was dressed with absorbent cotton saturated in the bichloride solution. The operation was performed in two hours after injury; that afternoon the patient was still unconscious, and that 8 P. M. he had his first convulsion, which was violent, lasting ten minutes, followed by tracheal rales, with failing pulse. Dr. Ford turned him over on his belly, holding his head over the side of the bed, when an abundant watery fluid flowed from mouth and nostrils, relieving his lungs so conspicuously that he turned him back on the bed on his right side, and in two hours his respiration became less embarrassed, and his pulse, feeble and frequent, continued from 142 to 140 until the following 9:30 A. M. Temperature never rose above 102° nor respirations

above 30 after operation. Bromides, chloral, hyoscyamus and digitalis were used to quiet restlessness, besides 15 to 20 grains bisulphate quinine daily for ten days. Milk diet and

absolute quiet in dark room were enjoined.

The first dressing was removed four days after the operation, when slight suppuration of the tuft of the pericranium, which protruded through the original scalp laceration, was noticed. He went on to good recovery, without any manifest disturbance in intellect or disposition, and is walking on his crutches.

This case, Dr. Ford thinks, illustrates the importance of early inspection of cranial fracture and the prompt removal of loose bones, thus anticipating acute encephalitis and possibly epileptiform seizures. It also proves that this region can be successfully trepanned without necessarily injuring the lateral sinus.

Trepanning Twice on Each Side of Longitudinal Sinus one inch Posterior to Coronal Suture with Removal of Intermediate Property of the Coronal States of Coro

ate Bone directly over the Sinus without Injury to it.

November 28th, 1888.—L. B., white female, age 12, after being given two ounces of whiskey, was chloroformed. An incision made through scalp and pericranium, leaving old depressed cicatrix in its centre. This flap, of sufficient breadth and length to use the trephine on both sides of the sagital suture, was dissected back. The intervening bone was taken from over the longitudinal sinus without wounding it, nor was the dura mater injured by the Hays' saw or trephine. To the touch, the membrane was thickened, and the brain below seemed hardened. His judgment prompted him to ligate the sinus in two places, and incise the part between with the dura mater, and possibly go further and incise a portion of the cortical substance of the brain in that region, which seems to be, according to Horsley and others, the motor area, which would explain the motor symptoms presenting in this case. The doctor wants to know if the recent operation does not suffice, is he warranted in a future effort to open the dura and attack the cortical substance, as indicated? Similar procedures in other like cases have been followed with good results. The child passed through a two hours' ordeal very well, and after the flap was sutured with ordinary silk, mercuric bichloride dressing was applied, and she rested well that afternoon and night, after repeated doses of whiskey to bring about reaction. He ordered to begin next morning with 3 grains bisulphate quinine three times a day, and milk and egg-nog for diet, and ice water

to drink, and $\frac{1}{32}$ grain morphia, if restless or apparently in pain. She did not require the morphia, and had not taken an opiate three days after operation.

November 27th, 9 A. M.—Temperature, 102°; at 9 P. M., 103°. During the day she moved herself in bed with slight

assistance. Has taken quinine and nourishment.

November 30th, 9 A. M.—Temperature, 99.2°; at 9 P. M.,

101°.

December 1st, 9 A. M.—Temperature, 99.2°: at 9 P. M., temperature was normal. Bandages became disarranged; dressed wound with absorbent cotton and carbolic acid solution; no suppuration. She took one pill of podophyllin, gr. \(\frac{1}{8}\); ext. nux vom., gr. \(\frac{1}{8}\); ext. hyoscyam, gr. \(\frac{1}{4}\); ext. belladonna, gr. \(\frac{1}{6}\), at 9 P. M. yesterday, but not operating by 9 A. M. to-day, she took two of the same pills, followed at 4 P. M. by enema of warm soapsuds, resulting in large action from bowels. Her habit has been that of constipation, and she had not been relieved for four days before the operation, but it being her habit, he did not consider it important to delay a day to "prepare her system."

Since the movement from her bowels she has flexed her thighs upon abdomen the first time since the last attack in September of this year, and to-night the doctor reports that she kicked the cover from her feet and legs with decided force. Even thus early there is a marked diminution in the clonic movements of the superior extremities. The case is

still under observation.

Cases in Surgery

Was the subject of a paper, by Dr. R. M. Cunningham, of Pratt Mines, Ala., ex Physician of Alabama Penitentiary, Prison Physician Pratt Mines Division of Tennessee Coal, Iron and Railroad Co., etc. Not being present, his paper was read by title. The following is a brief synopsis:

Case I.—Gunshot Wound in Back, Fracturing Seventh Rib Three Inches from Spine; Secondary Empyema; Aspiration; Recovery; Death Eighteen Months Later from Pulmonary Con-

sumption.

The patient did well for a week after the shooting. The examination at the time showed fracture of the seventh rib, penetrating near its lower border. The probe passed through the rib, striking an elastic tissue, which would not allow the probe to pass. This was just at the anterior or inner surface of the rib. There were no symptoms pointing to pulmonary lesion or opening of the chest cavity. At the end of a week the patient was suddenly seized with severe symptoms,

amounting almost to collapse. These symptoms were followed by the development of acute, circumscribed empyema, extending up to the spine of the scapula, and forward to the posterior axillary line. The patient was aspirated three times and made a good recovery. Twelve months afterward the patient developed tubercular consumption, the deposit being in the upper lobe of the right lung. The physical signs on the left side were negative, except slightly diminished respiratory murmur and dullness in the region of the old empyema. The patient died in six months after the development of the consumption, and eighteen months after the shooting.

The interesting features in this case were (1) The lodgment of the bullet against the pleura; (2) Its entrance into the pleural cavity by ulceration; (3) The limitation of the empyema; (4) The rapid healing of the bullet-wound without sloughing, suppuration, etc., notwithstanding the fractured rib; (5) The inquiry; Did the empyema or its remains act as the nidus for the lodgment and development of the bacillus tuberculosis? The Doctor believes that the latter

should be answered in the affirmative.

Case II.—Gunshot Wound in Neck; Fracture of the Left Lamina and Pedicle of the Sixth Cervical Vertebra; Compli-

cated by Croupous Pneumonia; Death.

This case was a healthy mulatto woman. The bullet entered the anterior part of the neck, passing back between the trachea and vessels, and lodged in the spine, fracturing the sixth cervical vertebra as described above. There was very little shock; and only partial motor paralysis on the left side, particularly in the leg. The bullet was removed with a common carpenter's gimlet passed along the tract of the bullet and scud into its hollow; the wound was dressed antiseptically. Patient did well for a week, when croupous pneumonia developed, involving the entire right lung and lower lobe of the left. Cardiac thrombus resulted, and death on the 3rd day of the pneumonia.

Post Mortem.—The tract of the bullet somewhat dirty and sloughy; vertebra fracture as above described; the left anterior column of the cord partially divided by depressed bone; membranes intact; no meningitis nor other inflammation.

The Doctor said the interesting featured in this case was its medico-legal aspect. In his testimony he gave it as his opinion that the patient died of croupous pneumonia, an "acute, specific infectious disease, caused by a specific materies morbi, the nature of which was not known," and that

a traumatism could not produce it. Those who believe croupous pneumonia to be a specific essential fever, with characteristic anatomical lesions, to wit, pulmonary inflammation, would agree with him. The pneumogastric nerve, trachea, etc., were not injured. The patient would probably have died in the end, probably from caries of the spine, but this question was not asked, nor would the answer have been allowed in evidence.

CASE III.—Gunshot Wound of Abdomen; Expectant Treat-

ment; Death.

This case was a healthy Scotchman, a miner, who was shot in the anterio-lateral, aspect of the abdomen. After being shot he walked some distance, carrying a number of bundles for his wife. Examination soon afterward. Patient resting in bed; no pain; no shock; no hemorrhage; no symptom of any kind, except mental anxiety. There was an opening in front and just below the anterio-superior spinous process of left ileum. Probe introduced and passed toward the median line of abdomen about four inches. Considering the absence of all symptoms and the direction of the probe, it was decided that the bullet had probably not entered the abdominal cavity. The wound was dressed with absorbent cotton; morphine given; patient directed to remain in bed. Eighteen hours afterwards, peritonitis developed, and the patient died fifty-two hours after the shooting.

Post Mortem.—General peritonitis. About two inches from the external opening, being continuous with it by an oblique passage toward the median line, was an opening in the parietal peritoneum. Just opposite was a small oblong cut in the bowels; one-half inch below was another opening in the peritoneum, continuous with a passage downward in the direction of the thigh. The only injury

to the abdominal organs was the cut in the bowel.

The bullet merely entered the abdominal cavity, cut a hole in the bowel, and made its exit within one-half an inch

of its entrance.

This case teaches an important lesson, to wit, that in all cases of abdominal gunshot wounds, regardless of the absence of shock, pain, hemorrhage, or any symptoms whatever, the surgeon should ascertain, beyond the shadow of a doubt, whether the bullet has entered the cavity or not, and the damage it has done. This should be done by inflation of the bowels with hydrogen-gas, as practiced by Dr. Senn, by enlargement of the bullet-wound, or by median incision,

regarding all cases of wound of the bowels as being neces-

sarily fatal.

CASE IV.—Compound Fracture of Lower Third of Left Thigh; Contusion Around Knee and Laceration of Leg; Compound Fracture of Lower Jaw; Dislocation Backward of Sternal End of Clavicle, and Fracture of Second Rib; Contusion of Arm and Small of Back; Secondary Amputation; Recovery.

This case was a large, healthy, finely muscled negro convict; was run over on the mine slope by twelve tram cars. producing the injuries enumerated above. There was considerable shock, amounting almost to collapse. There was a small opening, admitting the finger on the outer aspect of the lower third of thigh. The bone could not be felt through this opening. It was not certain, therefore, that the fracture communicated with the opening in the skin, but it most probably did. The soft parts around the knee were contused, and there was a lacerated wound in the front of the leg-all on the same leg. There was a lacerated wound from the right angle of the mouth to the angle of the jaw; the latter was fractured in its horizontal portion. There was a small contusion in the lumbar region, and above the left elbow. The wounds were all dressed antiseptically, the one in the face being first sewed up. Extension, and counter-extension, and the long splint and short anterior splint completed the dressing. The patient re-acted but the pulse continued from 120 to 140; slight fever and some delirium occurred. At the end of a week the dressing on the face was removed, and the wound had entirely healed by first intention. There was a slough three inches in diameter in the lumbar region, and a smaller one on the arm. Four days later the dressings on the leg were removed; the opening in the skin at the point of fracture healed. There was a large subcutaneous collection of pus above the fracture, in front and on the outside of the thigh, extending up almost to the groin and trochanter; also a large abscess around the knee. The wound in the leg is doing well. A free incision was made and large quantities of pus escaped. The cavity was washed out with corrosive sublimate solution, was dressed antiseptically, and splints were applied as before. There was undoubted septicæmia, and the patient did not improve. A few days later the thigh was amputated at the upper part of the middle third by a flap operation, but there was no sign of union. A large pus cavity developed beneath the skin, extending up to the trochanter. Another extra-periosteal extended up almost to the neck of the femur, along the inner surface of the bone. A drainage-tube was inserted under the skin in the sub-cutaneous pus-cavity; another laid across the wound. The flaps were brought together by silk sutures, the one ligature was brought out at the inner angle, and the stump was dressed antiseptically. Patient stood the operation finely, but the septicæmia did not improve until the sloughs in the back and arm had separated. After this the patient made rapid improvement and a good recovery. The Doctor said that in this case the pus formation in the thigh was due to the direct violence producing the fracture, and that, in his opinion, it was not due to the compound nature of the fracture. That in these days of antiseptic surgery the doubt, if any, should be given the limb.

Cases V. and VI. were laceration of the deep urethra from external violence. The first was treated by the catheter method and died; the second by primary perineal section and recovered. In all cases of laceration of the deep urethra by external violence, the primary operation should be performed.

Successful Vaginal Hysterectomy for Carcinoma Uteri.

Dr. Wm. H. Wathen, of Louisville, Ky., Ex-President of the Kentucky Medical Association, Professor of Gynæcology, etc., Kentucky School of Medicine, etc., read a report of a case.

The patient presented herself for examination in August. She was 34 years old and the mother of five children. From the history given it was concluded that the disease had begun 12 or 18 months previous. The uterus was in normal position, perfectly moveable, and no enlargement of pelvic or other glands could be detected. Carcinoma of the cervix uteri extended up the endometrium but did not involve the vagina or any of the uterine adnexa. She was suffering with almost constant bleeding, the blood mixed with offensive matter. Her digestive and assimilative functions were bad; she was rapidly losing flesh, and the general appearance indicated approaching cachexia. The operation was performed October 9th, at the Norton Infirmary of Louisville as soon as her local and general condition could be placed in good condition.

She was prepared for the operation by being well purged, carefully bathed, the hair cut from the pubes and the parts washed with ether and a $\frac{1}{2000}$ solution of bichloride of mercury, and the vagina washed with two gallons of hot

water which had been boiled. The instruments and sponges were placed by the nurse in a weak carbolic acid solution. The patient was placed in an exaggerated lithotomy position, chloroform administered and the neck of the uterus exposed by a Sim's speculum and retractors, and drawn to the vulva with a heavy volsellum forceps. The vagina was cut away from the cervix about 1 inch from its attachment, and two or three small bleeding arteries secured by catchforceps. The pouch of Douglas was opened and all posterior attachments of the uterus separated; then the uterus was carefully dissected from the bladder, great care being used to avoid wounding this organ or the ureters. Finally all that held the uterus in position had been divided except the folds of the broad ligament. The index finger was now well hooked over the left ligament and it was secured at a distance from the uterus by a catch-forceps of Dr. Wathen's The right ligament was clamped in the same way; both were then divided by the scissors near the clamps, and the uterus, ovaries and tubes were pulled away through the The uterus was not inverted, and was removed in 20 minutes. Not more than one or two ounces of blood were lost during the operation, and none after it. To prevent the possibility of hemorrhage all bleeding surfaces or points were caught in catch-forceps so that when the operation was over, 8 pairs were left in the vagina. The small ones were removed in twenty-eight hours, and the two large ones clamping the broad ligaments, in fifty-two hoors. A small pledget of sublimated coton was introduced into the vagina to hold the forceps apart and assist drainage, the vulva well covered with absorbent cotton, and a T band applied. No sutures were used to unite surfaces, and the vaginal vault was left open. No vaginal washes were used but the dressing of cotton removed twice daily and the external parts carefully cleansed. Her pulse, after the operation and the first day, was 60 beats per minute; it then ranged from 60 to 90, seldom above 75. Her temperature reached nearly 101° the second day owing to the irritability caused by the presence of the forceps, and then ranged from 98° to 100°. At no time was there any shock or sepsis, and she made an uninterrupted recovery, being out of bed the fifteenth day and leaving the Infirmary the nineteenth day after the opera-

Dr. Wathen believes the mortality in vaginal hysterectomy can be reduced as low as in ovariotomy, and that by the use of clamps the technique of the operation is so simpli-

fied and improved that the loss of blood is no longer an important factor, as the uterus, etc., can be removed in from ten to twenty minutes

Dr. Ed. J. Beall, of Fort Worth, Texas, presented a paper

upon

· Fibro-Cystic Tumor of Uterus and Unusual Treatment.—Cure.

He prefaced the paper by a reference to the report of the case presented to Texas State Medical Association, in which a fibro-myoma of three pounds weight blocked the pelvis, having incarcerated behind it a child weighing ten pounds. This tumor was enucleated and a living child was delivered with safety, the mother doing well. Perhaps this was the thirteenth time such a course had been pursued in lieu of Cæsarean section or other mode of treatment for similar tumors complicating delivery.

The case to which his paper related was not complicated with pregnancy. A tumor weighing about seven pounds had originated within the uterus, having extensive attachments, extending through the cervix, elevating the uterus to a point above the umbilicus, and tightening and distending the vagina. The lower portion of the neoplasm presented just within the ostium vaginæ. The Doctor efforted

to enucleate the growth as he had done in the case prefacing

the paper, but was unable to do so.

The condition of the woman forbade medical therapeutics, such as the use of ergot. It forbade also an excision; and the hope of extrusion by agents acting directly upon the contractility of the uterus. He believed abdominal section would have been resorted to by some practitioners. To this, however, he objected, as such hysterectomy had large mortality, especially with those with limited experience in

such operation.

He thought the ecraseur, or scissor excision, or Thomas serrated spoon (operations often done) would endanger the invasion of the peritoncal cavity, or leave portions to undergo disintegration, and subject the patient to further systemic infection. She was then suffering slightly in that way, consequent upon the introduction of an electrolytical trocar. He determined upon an epistotomy or perineal section—the reduction of the tumer, as it was being brought down by obstetric forceps, and ultimately the inversion of the uterus and the clearing off of the growth thoroughly, and after the strictest anseptic procedure. This was done. The uterus was restored to its normal position. Ergot was administered and the perineum was repaired.

The hæmorrhage was not inordinate, the uterus contracted well. The perineum repaired by primary union. The woman rapidly recovered her health and had normal menstruation, and was able to do well the duties devolving upon her as wife and housekeeper. He stated that the mother and aunt had died with intra-abdominal diseases of a character unknown to himself; and that upon a cousin he had made abdominal section for intra-peritoneal abscess consequent upon childbirth.

The tumor operated upon by the plan his paper indicated, had been developing for several years, and was attended with profuse hæmorrhage. The patient was quite anæmic, and suffered abdominal pain; yet three or four months had

now elapsed, and she now seemed in perfect health.

THIRD DAY—THURSDAY—DECEMBER 6.

Cystoscopic Explorations as a Diagnostic Means in Bladder Diseases.

In the paper read by Dr. A. V. L. Brokaw, of St. Louis, Mo., he considers some points in cystoscopic explorations and their value in the diagnosis of obscure lesions of the bladder, ureters and kidneys. The instrument used by him is the perfected Nitze-Leiter cystoscope and electric light, and he claims that its use has made it possible to examine the interior of the bladder with a considerable degree of success. He, however, goes a step farther, and while agreeing with E. Henry Fenwick that the cystoscope will not bear comparison in simplicity with the opthalmoscoe, laryngoscope or otoscope, he proposes to combine the use of the cystoscope in obscure lesions of the urinary apparatus, such as hæmaturia of obscure origin, calculous affections, pus in the urine from obscure sources, to accurately determine the size, number and character of tumors within the bladder, examine tubercular affections of that viscus, etc, with an exploratory epicystotomy. He cites fifteen cases in which Nitze diagnosed tumors of the bladder by means of the cystoscope, in nine of which rectal palpation, the sound and other diagnostic means had furnished negative results. Dr. Brokaw claims that under certain circumstances the cystoscope furnishes negative results also, and enumerates those difficulties as follows: "One of the great difficulties in practising cystoscopy is the presence of blood, mucus and pus, which, accumulating rapidly, renders it difficult to maintain a translucency of the fluid used in distending the bladder while the operator is making his examination, thereby seriously

disturbing his view of the parts;" and then proposes, in order to prevent this, that, "under these circumstances that an epicystotomy be performed, and by means of a simple irrigating apparatus, a constant current of clear fluid be kept up within the viscus, the cystoscope being introduced either per urethram, or through a very small suprapubic opening," claiming that such a procedure would not only allow of a thorough diagnosis, but of local treatment, when required, with much better chances of successful results than by any method heretofore in vogue. He says the danger of such an operation is not to be compared with that of the exploratory laparotomies, which are being daily performed, and is thoroughly convinced that the modern epicystotomy—the Peterson-Guyon-Perier operation—is very easily performed, and that the chances of possible danger are easily obviated. As to the technique of the operation, he renders the urine acid if possible, and thoroughly cleanses the bowel by means of a saline cathartic and repeated washing out-"as the presence of feecal matter in any part of the lower bowel may have a tendency to push downward the peritoneal fold in front of the bladder"shaves and scrubs the parts thoroughly, elevates the hips and narcotizes the patient. The median incision down to the transversalis fascia, or even to the anterior vesical wall. must be cleaned out, all tearing of tissues being avoided— "as pockets difficult of drainage might be easily formed." The bladder is washed out with an antiseptic fluid, especially if cystitis be present, giving preference to the boroglyceride solution; and while the amount of distensions varies with each case, he is convinced that in the majority of cases from 4 to 6 ounces is sufficient. He uses the Peterson colpeurynter, or even sponges, in the rectum and claims the amount of distension necessary can be better approximated after the median incision is made, allowing the bladder to be easily felt, and sometimes seen above the symphysis pubis. Pressing a metal catheter firmly and gently against the anterior vesical wall, and securing the sides by traction threads, the incision into the bladder is made just large enough to admit a No. 23 F. cystoscope. He performs Guyon's manœuvre of lifting the pre-vesical fat, and claims that by so doing the peritoneum is never seen; and cites 43 cases in which the operation was performed in the dissecting room, in none of which the peritoneum was opened and in but a few instances seen. If conditions are present necessitating local treatment the vesical wound may be enlarged. (Guyon's two cases of supra pubic drainage after tubercular

ulceration.—Revue de Chirurg. No. 4, 1888.)

He cites Iversen's two cases, in which the high operation was performed for the purpose of inspecting the ureters, and the diagnosis of calculous pyelitis made. After referring to the theoretical procedures of Tuchmann and P. Müller with their ureter compressors, he says that "electro-cystoscopy offers us the only practical and accurate means of determining from which ureter the blood or pus is discharged."

In conclusion, he cites an interesting case in his private practice, in which severe hemorrhage from the bladder was caused by rupture of a varicose vein near the vesical neck, in which the difficulties of electro-cystoscopic examination were admirably illustrated, two cystoscopic examinations being necessary before any idea could be formed as to the source of the blood, and illustrating how an epicystotomy would not only have done away with the difficulty of maintaining a translucent medium, but would have permitted the bleeding point being treated and the hemorrhage immediately checked.

He summarizes the advantages of electro-cystoscopy com-

bined with epicystotomy as follows:

1. The maintenance of a clear medium so essential to accurate observation.

2. The diagnosis being made, the possibility of immediate treatment of local conditions, such as tumors, calculi, neoplasms, foreign bodies, etc.; the collection of fluid from the ureters, etc.

3. If necessary, perfect drainage is secured in the after treatment, permanent, if desirable, especially in cases of prostatic hypertrophy when removal of the obstruction is impossible or contra-indicated; then the epicystotomy of Hunter McGuire is clearly indicated, and the necessary modifications easily made.

4. The dangers of the epicystotomy with an opening of such small size as to admit only the cystoscope for diagnostic purposes would be but little greater than supra pubic puncture, and could be easily closed if no indications for

local treatment are presented.

Shock of Injury and Its Effects

Was the title of a paper read by Dr. John R. Page, of Birmingham, Ala., formerly Professor in the University of Virginia. He said that shock of injury is a surgical condition, which has been expounded by men of great ability, from the days of John Hunter and Francis Xanvier Bichat, to the present; and yet, when we are brought face to face with these conditions, we are often perplexed with fears and doubts, that we may do too much, or too little, for the

restoration of the patient.

Shock of Injury is manifested always by more or less depression of the nervous system, with a secondary and similar result on the sanguiferous, the immediate result of mechanical injury, inflicted on the living organism; proportioned in extent to the intensity of the external violence; the amount of the portion injured; the relative importance of the injured part in the animal economy; and the previous state of the system; or of an aggravated character—as for example—when a limb has been crushed, scalded, or burned, when an internal organ, such as the liver, kidney, bowels, lungs or brain, has sustained some mechanical injury. If the dépression be slight and transient, the probability is, that important internal organs have escaped; but if it be both great and protracted, the prognosis is, on the contrary, unfavorable—the inference being, that vital organs are involved.

The symptoms of nervous shock, after injury, vary from the slightest appreciable lowering of the vital powers, to complete syncope. Commonly the patient falls, lies helpless, cold, shivering, more or less unconscious, probably incoherent when moved, convulsions may supervene; the pulse rapid, small, indistinct; respiration imperfect, sighing. Nausea and vomiting, not unfrequently preceding reaction, seem to be concerned in its induction; a cold sweat often bedews the shrunk and pale surface, the features are collapsed, the eyes roll widely, or else are fixed in an upward, listless stare; often the sphineters are relaxed, fæces and urine seeming to pass involuntarily; sometimes the reaction from the kidneys is surpressed, the cerebral functions become wholly suspended, the heart's action ceases, and existence terminates. Sometimes these symptoms abate rapidly, reaction comes on, and is soon established; sometimes these symptoms persist for hours, reaction proving both late and gradual; not unfrequently reaction fails, sinking is again progressive, syncope is complete, and life becomes extinct.

Reaction, or a more or less gradual return towards health, is usually preceded by a rigor, and often by full vomiting. The nervous system is restored, and the sanguiferous is proportionally relieved from depression. Sensation, power of motion, intellectual function, special sense, gradually return,

The patient becomes conscious of his state, and inclines to inquire into it. This may be the result of nature's effort alone, or our art may assist in its induction. The progress of this reaction should be watched most carefully, it may advance to completion, and attain the even balance of health, little or no extrinsic aid being required. Or it may overstep the bounds of health and pass into disease, producing *irritative* or inflammatory fever, sooner or later tend-

ing to renewed prostration, collapse and death.

Again, shock of injury may be considered practically as of two kinds—mental and corporeal. In the former, the patient "is more scared than hurt;" in the latter, the more serious, depression aids the judgment of the attendant surgeon and enables him to decide. There are many cases in which both forms of shock are more or less combined; but the one form is in its nature transient; the other, more or less enduring. Diagnosis can only be made by ascertaining the history of the accident, and carefully noting the existing symptoms, in what proportions the combination has probably occurred.

The treatment pursued will be indicated in a short detail

of the following cases:

Case I.—I. H., age 20, June 2nd, fell from a caboose car while it was crossing a trestle at the rate of seven miles an hour, a distance of 52 feet to the ground below, about 1:30 A. M., o'clock. Was seen about 11 P. M., and found in the following condition: Unconscious, incoherent, and just reacting from the shock of the fall, several attempts having been made to vomit. Surface of the body cold, face indicating great suffering, arms tossing and body writhing with pain which seemed to be located in the right side of the body, and in the right hip. Pulse 90, irregular, with pulsation of the corotids, and a distinct tremor of the muscles of the abdomen, caused by pulsations of the abdominal aorta. Respiration 26, irregular; pupils widely dilated; retention of urine and rigid priapism; numerous small bruises on the legs and arms, with a severe contusion (hæmotoma) over the right hip. Two hypodermic injections of morphia and atropia, (tablets; morphine \(\frac{1}{4}\) grain, atropia \(\frac{1}{2.0}\)) having been given, quiet was sufficiently produced to enable a thorough examination of the body prone, which revealed the fact, that no bones were broken or joints dislocated, but the right side was severely contused; the severest injury, however, was due to the concussion of the brain, spinal marrow, thoracic and abdominal viscera. The temperature was

100°. One pint and a half of urine drawn off with catheter, bloodless. Pulse rose to 130 by 3 o'clock P. M., and remained at *that*, with increasing stupor until 6:40 P. M., when the patient was brought to the city in the passenger

train on a litter, and placed in quarters.

June 2nd.—Night, urine drawn; increasing stupor, great jactitation of arms, necessitating hypodermic injections of morphia and atropia every five or eight hours. Ice given and swallowed when placed in the mouth, and body rubbed over with equal parts of whiskey and tepid water every two or three hours.

June 4th.—When aroused, an incoherent jabber, without consciousness. Warm water enema, two quarts given, retained for four hours, when two large involuntary evacuations were produced; pulse 126, temperature 102°, respiration

26.

June 5th.—Partial consciousness; pulse, 108; temperature, $101\frac{1}{2}^{\circ}$; respiration, 20. Diet from the time the enema acted. Bovinine 3j, alternating with milk 5ss, every three hours—

swallowed slowly but reluctantly.

June 6th.—Treatment as above. Probable results or prognosis up to this date regarded as surely unfavorable; thence on, as probable recovery of uncertain kind. Jactitation much less; pupils less dilated; still great restlessness, when the effects of the morphia and atopia wear off, due to irritative fever or "constitutional irritation." Bladder evacuated by catheter every six or seven hours; morphia injections continued every eight hours, with milk f3ij every three hours during the day. Bovinine at night; consciousness improving.

June 7th.—Pulse, 104; temperature, 101°; restless, with indications of pain over the right side of the body. An enema of tepid water given, brought away a large quantity

of hardened fæces, followed by quiet and relief.

June 8th.—Pulse, 120; temperature, $101\frac{1}{2}^{\circ}$; urine partially evacuated voluntarily, but still drain off; quantity of milk increased; hypodermic injections reduced to two in twenty-four hours. Night visit—10 P. M.: Pulse and temperature same; much more conscious; somewhat rational.

June 9th.—Pulse, 104; temperature, 101°; mind still unsettled; urine and fæces discharged involuntarily; diet

same.

From this time on to the 20th of June the patient continued to recover gradually; but was not absolutely rational until the 19th. Soon after this he was taken to his home in

Atlanta, where he has made a fair recovery of his strength and normal functions.

The notable points in this case are that no bones were broken or joints dislocated in the fall of fifty-two feet, with the train moving at the rate of seven miles an hour. This was due to the nature of the moist, alluvial earth upon which the impact of the falling body was expended. To substantiate the fact of general concussion of the whole organism, rather than any special concussion of the cerebro-spinal system, witness the absence of paralysis of one or more limbs. or of hyperæsthesia or anæsthesia, or other phenomena dependent on irritation of the large nerves that take their origin from the medulla oblongata—excepting, perhaps, the pneumogastric, whose cardiac branches seem to have been greatly disturbed, as seen in the tumultuous action of the heart propagated to the carotids and the abdominal aorta, and dorsal and lumbar plexuses manifestly shocked, as seen in effects upon the bladder and intestinal canal only, relieved by catheterization and enemata. The temperature from first to last pointed to vaso-motor disturbance from action of the sympathetic nerve, rather than that exerted by the spinal cord—having more intimate connection with the conditions of irritation and congestion of the thoracic and abdominal viscera, due to the common shock from the fall.

Case II.—C. W., age 26, a powerful negro car-coupler, was caught between the bumpers of two heavily laden cars and severely compressed or mashed over the thoracic and abdominal cavities, with the sides presented to the compressing force, producing severe shock, with entire loss of consciousness for nine or ten hours before reaction came on. Patient seen soon after the accident; was found cold, shivering, pulseless; heart's action quick and irregular; respiration 9 or 10; sighing. Several hypodermic injections of whiskey were given immediately, followed soon by injections of morphia and atropia, with application of flannels to the chest and abdomen, wrung out in water as hot as could be borne, and kept continuously applied for forty-eight hours. At the expiration of nine or ten hours, reaction was established, with partial consciousness and more or less active delirium; temperature, 100°; pulse, 120. Urine was drawn off and a copious enema of warm water was given. This temperature rose to 102°, with pulse 130 during the next forty-eight hours; but soon subsided, and served to mark the stadium of irritative fever in its rise and gradual subsidence. From this time forward this patient continued

to improve, and was returned to active duty in less than forty days from the date of accident. These two cases may be taken as types of many others seen as the result of rail-way injuries.

Dr. I. S. Stone, of Lincoln, Va., presented a paper through the Secretary, which was read by title, in the absence of the

author, on

The Field and Limitation of Laparotomy.

The possibilities of laparotomy were hastily reviewed, but the main object of the paper was to show the necessity for early operative interference in the various diseases and injuries of the abdominal organs. The limit of this operation, so far as the chronic diseases of said organs are concerned, extends to every organ, in the hands of special surgeons; while in acute cases, such as in wounds or acute disease, the general surgeon or practitioner must be ready to operate. The point was made that explorative operations are generally devoid of danger, while delay, even on account of shock following injury, is often fatal. In this connection it was claimed that, as fatal peritonitis generally accompanies or immediately follows shock, it is worse than useless to see what may be gained by waiting. The modern surgical technique of using hot water irrigation and drainage often serves at once to save the patient from pending shock and fatal peritonitis.

Several cases were narrated showing what might have been done by timely operative work inside the abdomen. The author claims that most cases of pelvic abscess have their origin in salpingitis, that the evacuation of any pelvic abscess through the vagina proves nothing as to its origin, while laparotomists are becoming more and more absolute in their convictions that pelvic abscesses are always the re-

sult of a diseased tube.

The following conclusions were arrived at as representing the author's views:

1. All abdominal organs may be reached and successfully operated upon if the operator is skilled in abdominal surgery.

2. Every surgeon should be prepared to open the abdomen if the symptoms indicate serious acute disease or injury, as

the cause may be easily found and remedied.

3. If the case is one of malignant disease and is attended by great exhaustion, it is better to close the abdominal wound without interference.

4. Early opening of the abdomen in acute disease or fol-

lowing accident is imperative. Delay is often deadly. Critics have never claimed that too many operations are done for such complications, although we often see criticisms as to the propriety of ovarian and tube operations.

5. Laparotomy, followed by washing out and draining the peritoneal cavity, is the recognized and only successful

treatment of tubercular or suppurative peritonitis.

6. In diseased uterine appendages their removal is justifiable when the patient's general condition demands it. In severe neuralgias, dysmenorrhæa, and grave hysteria of the mouth, the only remedy is to remove existing disease.

Forces Preserving Cerebral Integrity

Was the subject of a paper by Dr. W. Locke Chew, of

Birmingham, Ala.

It was the attempt of the author to show that the exercise of the mind and the essential functions of the brain, as memory, imagination, moral act, consciousness, and the like, was not the cerebral exercise that preserved the integrity of the cerebral cell, but that the force that exerted this influence was purely mechanical; that the encephalon had marked motion in the cranial cavity; that this motion was anterior and posterior motion, and an up and down motion; that the brain was kneaded—that it was compressed and relaxed at each action of the heart; that the great volume of blood that went to the brain was more for this kneadation than for nourishment: that the cerebral substance was not vascular; that fatal hæmorrhage from cerebral substance was hardly possible, and even troublesome oozing rare. In support of this ground he brought forth ten cases of cerebral surgery as follows:

Case I.—Case of compound comminuted fracture of frontal bone and bones of face, with division of the superior longi-

tudinal venous sinus.

Negro, aged 26 years; had frontal bone torn away; roof of either orbit removed; division of superior longitudinal venous sinus and falx cerebri, and of the right ophthalmic vein; removal of the cribriform plate of the ethmoid, fractures of the vomer, both turbinated, both nasal and either superior maxilla. The right frontal cerebral lobe was torn and cerebral substance escaped. The anterior margin of the anterior cerebral lobes rested two-fifths of an inch in front of the sphenoidal fissure and one inch from the (posteriorly to the) nasal eminence as the patient lay supine. If the patient turn on face and abdomen, the anterior lobes presented at the wound in the skull. Hæmorrhage checked

by aseptic tampons. Perfectly conscious for four days. Death from inflammation at base of skull.

Case II.—Compound comminuted fracture of skull with

depression. Recovery.

In this there was laceration of the cerebral substance and a subdural clot, dura being untorn. The fragments were removed and the clot left beneath the intact dura. Fracture converted into simple fracture. Recovery without complication.

Case III.—Traumatic epilepsy. Trephine.

This case is of interest only to show marked retraction of the cerebral substance from the site of operation being fully three-quarters of an inch.

Case IV.—Compound comminuted fracture of skull with

iron rod thrust through brain. Death

Remarkable for lack of hæmorrhage, notwithstanding the rod passed well through the entire substance of the brain near the base.

Case V.—Compound comminuted fracture of skull. Loss of cerebral substance. Recovery.

Lack of troublesome hæmorrhage or even oozing.

The remaining cases were cases of shot wound of the cerebral substance, and are noteworthy in that in none was the hæmorrhage fatal or troublesome. Fatal hæmorrhage is to be feared but slightly from any wound of cerebral substance.

Treatment of Strictures of the Urethra by Electrolysis

Was the title of a paper by Dr. S. M. Hogan, of Union Springs, Ala. He awarded to Dr. Robert Newman, of New York, the credit due him for many valuable suggestions in regard to this plan of treatment, and especially as to the proper use of the current. It is only necessary to dissolve the cicatricial tissue of the stricture by the chemical action of the current, which can be done without generating much heat, by using a current of great intensity, but of little quantity—using small plates and a weak fluid. Dr. W. T. Belfield, of Chicago, treated 37 cases successfully, uses electrolysis now almost exclusively except for strictures within an inch of the meatus, or for strictures of large calibre in the penile portion of the urethra, and thus summarizes its advantages: "It is applicable to strictures at any point of the urethra. Any stricture or succession of strictures, however rigid or cartilaginous, however tight (even if impermeable), can be safely and readily perforated. When properly handled, it can produce no false passage or other local

lesion. The effects are more enduring than either cutting or stretching. Whether or not they are permanent (as maintained by Dr. Newman), my experience does not yet enable me to assert." Dr. Hogan's more limited experience endorses all that Dr. Belfield claims. But we must bear in mind that it is purely a dialytic effect we wish to produce. and with as little heat as possible. Success can be assured only by observing the directions given by Dr. Newman, as follows: "Before operating the susceptibility of the patient to the electrical current should be tested. The problem is to produce absorption, and not cautery. Therefore weak currents at long intervals are best. The best position for the patient to assume during the operation is that which is most comfortable to him and to the operator; it may be the erect or the recumbent. [Dr. Hogan prefers the recumbent]. Anæsthetics are to be avoided, as it is better to have the patient conscious and able to tell how he feels. Care must be taken to keep the electrode in line, so that the point will not deviate or make a false passage. Force should never be used. The bougie must be guided in the most gentle way, and electricity be allowed to do the work. During one séance, two electrodes in succession should never be used. It must not be forgotten to stop the current before withdrawing the electrode; otherwise acute pain will be induced in the course of the urethra. Pain should never be inflicted during electrolysis. Therefore it should never be applied when the urethra is in an acute or subacute inflammatory condition. It is better to leave a little urine in the bladder: it seems to diffuse the stimulus, and it is more agreeable to the patient than when the bladder is empty. While it is very desirable to have a fine battery, a milli-ampere meter, a selection switch board, etc., yet they are not absolutely necessary. The battery which I am now using (and one with which I am very much pleased), contains twenty cells zinc and carbon plates. These plates are round, about $4\frac{1}{2}$ inches in length, and a half inch in diameter. The fluid is composed of:

If used when freshly prepared, this solution should be diluted about one-third, and the plates should be perfectly clean, and all of the same size and length. The conducting cords should be extra long, and one of them bifurcated so as to bring any number of cells into the circuit, without

inconveniencing the patient by breaking or connecting the current." Dr. Hogan prefers Newman's electrodes. Everything being ready, pass the selected electrode down to the stricture, and connect it with the negative pole at the first or second cell—using the bifurcated cord to make the connection. Keep the electrode steadily but lightly pressed against the stricture and in line with the urethra. connect the first cell or positive pole with a carbon electrode, covered with a large sponge dampened with warm water and apply to the back or hip of the patient. Now increase the number of cells in the circuit by using first one and then the other end of the bifurcated cord attached to the negative pole until you detect the escape of gas bubbles, or until the patient feels a warm or slightly pricking sensation in the urethra. Now by keeping the electrode slightly pressed against the stricture, absorption soon takes place, the stricture vields, and the electrode advances. At times it will fairly jump through the stricture; at other times, it will require several séances to pass the stricture; but with patient perseverance and a proper adaptation of the electrode and current, any and all the strictures can be passed. When passed, the electrode should be slowly withdrawn until the insulated point engages the stricture again where it should remain for several minutes so as to soften or dissolve the cicatricial tissue. Then stop the current and withdraw the electrode. Such séances may last from ten to thirty minutes, and be repeated every week, two weeks or month —each time increasing the size of the electrode until all the strictures are removed. Such, in brief, are Dr. Newman's directions.

But Dr. Hogan does not accept the doctrine that strictures are cured by absorption alone with small cells and weak fluid; the softening and the dilatation are also material elements. By using small cells and weak fluid, we can regulate the quantity of electricity. None of the cases he has treated could do more than admit a filiform bougie when they first came under treatment; all of them were dismissed, or dismissed themselves, after they got so as to admit No. 20 (French scale). He usually commenced treatment with about No. 10 (F.) electrode, and the treatment required from three to six months.

Among his cases, was a traumatic stricture of female meatus extending three-fourths inch of urethra. From 6 to 10 cells were used in different séances, during which gas escaped, and the parts changed to a creamy color before the

electrode made any advance. The tissues softened for nearly a line around the electrode, and then were perceptibly dissolved. Yet he saw nothing of a retrograde metamorphosis action. nor did any inflammation attend or follow the treatment. Another case was a man aged 60 years, with urethral stricture from gonorrhea. He had had urethral fistulæ, seme of which still remain, but urine escaped through only one; all of them opened through the perineum. An immense amount of indurated tissue was around the fistula from the scrotum (which it involved) to the anus. The prostate was very much enlarged. The patient was very feeble, occasionally had convulsions; chills and fever for more than a year; and not a drop of urine has passed through the urethra in two years. Attempts at dilatation had failed—one of the séances resulting in making a false passage. The stricture was found two inches from the meatus. No. 10 F. electrode with 6 to 8 cells of a zinc-carbon battery were used, and was passed into the bladder, and he passed urine through the urethra. He reported two other interesting cases of traumatic stricture of the urethra cured by electrolysis.

Dr. R. D. Webb, of Birmingham, read a paper on Operative Procedures in Hypertrophy of the Prostate,

Which, he said, was a sequel to the paper prepared last year for the Alabama Surgical and Gynæcological Association.

He said but little attention had been given to curative measures in this affection by the older surgeons; and it was not until Mercier commenced his studies in 1836, and published his researches in 1841, that the subject received systematic thought. To Mercier (who first emphasized the fact that a large proportion of the cases of obstructed urine in hypertrophy of the prostate was due to "median enlargement") is due the credit of directing the minds of surgeons to curative measures.

His operation of punching an artificial urethra through the obstructing bar or band, and a few fortuitous cases, in which, during operations for stone, in which portions of the enlarged gland had been removed incidentally, gave origin to the idea of relief in cases before considered hopeless.

The first efforts at relief were by *punctures* of the bladder, per rectum, suprapuble, or through the gland itself. These, aiming only at temporary relief, were soon abandoned. The surgery of the present day demanded more radical relief.

The operation of Mercier, who was the pioneer in the direction of permanent relief, has not been generally well received in this country, Dr. Gouley, of New York, being the only one, so far as he knew, who has performed it in the United States. Its originator designed it for cases of obstruction in the median portion, and in these the bar or obstructing band should not exceed one-half or three-fourths of an inch. It is worthy of further trial in well-selected cases.

Following this was the galvano-cautery operation of Battini, of Pania. It is suited to a wider range of cases than the process of Mercier, and may be used in cases of general or longitudinal enlargement, as well as in median enlargement. It is not devoid of danger, and has not been used in a sufficient number of cases to warrant full confidence. So far it has been confined to Italy and Germany, where a good

degree of success is claimed for it.

Dr. Robt. Newman, of New York, claims good success by means of electrolysis or absorption by means of the galvanic current used for only a few seconds. Absorption of the prostate in this way has been doubted on account of failures by some in electrolysis for stricture of the urethra. The principle here is different. The latter is an action upon cicatricial tissue, while the former is on a glandular structure. The process is devoid of danger, and may be used in the earlier stages of the enlargement. It should not be discarded without thorough trial.

Another electrical process is that practiced by Casper, of Berlin. He punctured the gland, per rectum, by a needle, properly protected, and connected with a galvanic current for fifteen minutes, making three or four punctures. Of the four cases thus treated he claims good results in two, no relief in one, and injury to surrounding parts in the other,

from the imperfect insulation of the needle.

Within the last decade resort has been had to perineal prostatatomy and prostatectomy, by Gouley, Harrison, Lang and others. By this method both median enlargements and intra-vesical pedunculated outgrowths have been successfully removed.

Also suprapubic prostatectomy has been used by Aitkin, McGill, and Hunter McGuire. Dr. McGuire, in his cases, leaves the incision in the abdomen and bladder to heal, with a fistulous opening remaining, through which the urine is passed; the patient having voluntary control of its retention and expulsion.

Thus the methods are ample; what is now needed is an accurate differentiation of cases, a prudent selection of the method suited to each case, and a judicious determination of the time when it may be proper to interfere by operative procedures. This differentiation is based upon a clear idea of the varieties of obstruction. They may be thus classified:

1. General enlargement of (a) one lateral lobe, or of (b) both lateral lobes.

2. Median obstruction by (a) sessile tumors, or (b) bar or valvules at neck of bladder

3. Intra-vesical outgrowths, such as (a) peduncular outgrowths of median portion, or (b) prolongation of lateral lobes.

These varieties may occur separately and distinct, or they may be combined one with the other. They may be differentiated by (a) the clinical history of the case, (b) examination per rectum or urethra, or (c) by cystoscopic exploration. The details of these methods cannot be given in this epitome with sufficient fullness to make them useful.

If by these means we diagnose a median enlargement, Mercier's or Battini's methods may be used. If a general enlargement, Battini's method or prostatotomy may be used. If general enlargement with intra-vesical outgrowths combined, we may resort to suprapubic prostatectomy, with urethral prostatotomy, or perineal prostatectomy, as practiced by Harrison

It has been said that no operation should be performed so long as a catheter can be introduced and the urine drawn This should be modified. When we have at our command methods that may be used with safety in the earlier stages, and relieve the patient of years of annoyance and suffering, no good reason exists why we should not use them, And probably in this timely interference, is when we may expect most in the relief of prostatic troubles. The conservative spirit which has guided our actions to the present may be in danger of going too far and leaving undone what might be well done. The processes of Mercier, Battini and Robt. Newman are well worthy of consideration in well-selected cases, before patients are worn out by long suffering and reduced to the last extremity, when the system is badly prepared for any operation. Even perineal and suprapubic prostatectomy, in this day of improved surgical technique and antisepsis, may well be resorted to in the earlier stages, rather than an apathetic contemplation of a life of suffering

and the gradual and sure approach of a condition in which, as a *last resort*, these measures are attempted with but little hope of success.

Electrolysis in Morbid Alterations that are Produced in the

Prostate by Gonorrhœa of the Urethra.

In his paper, on the above subject, Dr. J. D. S. Davis, of Birmingham, Ala., reported thirty-seven consecutive cases treated successfully with electrolysis. He said that so long as the ædematous swelling of the prostate is not very intense, (the pus corpuscles originating in the cryptæ become mixed with the normal secretion of the gland and form with it a gluey, yellowish green fluid to be thrown off through the urethra), electricity, properly applied, will restore the organ to health, and relieve it of a disease that never goes away of itself. In mild, negative galvanic currents we have a practical, painless, harmless and convenient means of treating this form of the disease. In cases where the ædematous swelling of the prostate is very tense, even to the complete closing of the urinary tract, electricity will often offer the best and simplest route to complete recovery. In cases where there is progressive suppuration, with the cavities of the gland filled with pus and much dilated, galvanic stimulation, with varying dosage and polar action, even in such cases of extensive suppuration, will prevent the glandular spaces from coalescing, correcting, to a very large extent, the perversion of nutrition. Whether it be a question of suppuration or hypertrophy, the current will be, in experienced hands, a stimulant of the first order, which will tend to re-establish the equilibrium and normal function of the gland. In cases where there is progressive suppuration with effusion of pus into the surrounding tissue, he makes a free incision with the knife through the perineum, to evacuate the pus and secure drainage, extending the incision to and through the prostate gland. This class of cases, which primarily originates from the propagation of the acute, purulent urethral gonorrhea to the prostate gland, (and a condition often aggravated by the injuries of the prostate by the introduction of the catheters, bougies, and impaction of calculi, is already suppurated,) will, after a thorough evacuation of the pus and washing out the cavity under galvanic stimulation, rapidly return to its natural size and regain its normal function.

After giving reasons, founded on physiological and familiar facts, for the use of electrolysis, he proceeds to give direc-

tions as to the method of application.

Next to a reliable battery, armed with a good rheostat and a reliable galvanometer, he emphasizes the importance of the proper selection of the intra-urethral electrode. The cutaneous electrode should be large, and applied to the abdomen. The cathode should be carefully introduced into the urethra, and a very weak current of electricity passed, increasing gradually until the proper amount is reached.

The average amount of electricity used was five milliamperes, continued for fifteen minutes at each séance, and repeated four times, with intervals of three days between each

séance.

The edematous swelling that follows two or three days after the use of electricity in stricture of the urethra anterior to the membranous urethra, often causing passive obstruction, does not take place from the use of electrolysis in the class of prostatic troubles reported in his paper. In urethral stricture, the cicatricial tissue does not immediately begin to disappear, but the prostate gland, (which, he said, is more susceptible to the influence of low currents) begins at once to decrease in size, and continues to decrease to complete recovery. The spasmodic action is allayed at once. softening taking place, and the absorptive action begins immediately. He said that the prostate receives the electric stimulation more kindly and is benefitted more effectually by the contemporary effect of the current than stricture anterior to the membranous urethra. The edematous swelling following the use of electrolysis in stricture of the urethra anterior to the membranous urethra does not occur after its use in the prostate; and, hence, it can be oftener repeated.

Dr. J. M. Taylor, of Corinth, Miss., reported the following

remarkable

Case of "Cut Throat."-Recovery.

On October 29th, 1888, R. W., about 24 years of age, of exceptional good morals, and well educated, under an insane impulse, cut his throat with a dull pocket knife. The wound was made transversely through the thyro-hyoid membrane, separating the larynx from the base of the tongue and opening the pharynx. The depressor muscles of the hyoid bone, the sterno-hyoid, the thyro-hyoid and the omo-hyoid, I think were all severed. The larynx and trachea dropped down leaving a gaping wound five inches long and two inches wide. The carotid arteries could be seen plainly pulsating in either angle of the wound. The larynx and trachæ thus set free from attachment above, and acted on by the sterno-hyoid muscles projected forward

and afforded a beautiful view of the inside of the vocal box in the living subject. The finger passed through the wound, readily entered the pharynx and fauces; or passed through the mouth and around the base of the tongue, if long enough, would have come out at the wound. Water taken into the mouth ran out at the wound. All power of deglutition was lost.

The wound was inflicted in Tishomingo county, Miss., at a saw mill ten miles South of Inka. Dr. Taylor was called to see the patient with Drs. R. S. and W. A. Hodges, and arrived there (over forty miles) about twenty hours after the occurrence. At that time all hæmorrhage had ceased. It had been quite free, but not excessive. The patient was resting very quietly and breathing very easy through the yawning wound. Pulse was fairly good, and his mind was

apparently entirely clear.

Coaptation of the wounded structures in the deeper parts of the wound was impracticable. But we drew the skin and fascia together and cl sed the external wound with eight or ten silk sutures. The edges of the wound came together so accurately that the line was scarcely visible and neither blood, mucus, nor air escaped through it. Breathing through the nose and mouth was perfectly free and easy, entirely normal. Dr. Taylor believes healing of the external wound by first intention, would have occurred if the head could have been kept bent forward But we were compelled to nourish him by means of the stomach tube. the frequent introduction of which caused the stitches to yield, so that air and mncus passed between the edges of the wound. To introduce the tube it is necessary to tilt the head strongly backwards, and the finger in the fauces to guide the tube causes efforts to vomit. Nothwithstanding all this there was but little leakage for four or five days. But after that time, slight suppuration along the suture tracts caused them to yield, and the wound began to gape, and some of the stitches cut through. We removed the remaining stitches, as they were doing no good. The wound had closed only for a short distance in each angle. We attempted to approximate the lips of the wound with plasters but the beard and the sharp angle under the jaw interfered with the adhesion of the plasters, and the frequent bending of the neck back to introduce the stomach tube made them very inefficient. Yet healthy granulations appeared on all the wounded surfaces, and the patient got along much better than we expected. He took one pint of milk with an egg and a little sugar beat up in it twice a day, through the stomach tube. He rested well most of the time; a few times he manifested some mental aberration, but chloral and bromide of potassium by enema acted admirably. These sedatives with a few hypodermic doses of morphine and some laxative enemata constituted all the medication required. He desired to recover, and cooperated cheerfully in everything done for him. He became very tired of the stomach tube, and Dr. W. A. Hodges, who had the immediate charge of the case, tried nutritive enemata, but after five days it was deemed best to return to the stomach," was left off, and he got along very well on one and half pints of milk twice a day. He retained his strength well, and did not emaciate perceptibly.

Just one month after the injury, he recovered the power of swallowing liquids, and now (Dec. 4th) the opening in the larynx is less than a quarter of an inch in diameter, and the external wound less than one and a half inches. He is all the time hungry and is gaining strength every day. The simple water dressing at first, and a little cosmoline cerate afterwards kept the wound in as fine condition as could be expected. There was scarcely any suppuration at any time. No antiseptics whatever were used. There was no cough or other symptom indicating any laryngitis

or bronchitis.

Dr. J. H. Blanks, recently removed from Meridian, Miss., to Nashville, Tenn., where he is lecturing in the Medical Department of the University of Tennessee—having been elected Associate Professor of Practice of Medicine in that institution—had not prepared the paper he had expected to have ready for the session, but by request stated the following as the main points of the paper he intended to have ready on

Treatment of Lacerations of the Perineum and Rectocele.

(1.) That lacerations of the perineum with rectocele do not receive the attention their importance demands.

. (2.) That many operations on the cervix for the relief of reflex phenomena are successful because perineorrhaphy was done at some time.

(3.) That lacerations of the perineum with rectocele will produce decided febrile movement of long duration, strongly simulating malarial toxemia.

(4.) That rectocele is the cause of most cases of chronic

diarrhœa and dysentery of women.

(5.) That it is a frequent cause of the indigestion and nervous phenomena known as hysteria.

(6.) That many cases of laceration of the perineum are not recognized because the tear does not involve the skin.

(7.) Relief often follows the use of pessaries in versions, not from the pessary, but because the perineum was closed to support it.

These facts he expected to prove by report of a number of

operations.

MEDICAL EXAMINING BOARD OF VIRGINIA.

SECRETARY'S OFFICE, CHARLOTTESVILLE, VA., Dec. 31, '88.

The following physicians have been licensed by the President of the Medical Examining Board of Virginia since the last official publications of the Board in April of the expir-

ing year:

Dr. J. A. Anderson, Elba, Va.; Dr. J. B. Anderson, Gaines' Cross Roads, Va.; Dr. George Corrie, Richmond, Va.; Dr. J. M. Gibson, Claremont, Va.; Dr. I. F. Graham, Wytheville, Va.; Dr. S. B. Hill (colored), Danville, Va.; Dr. J. Shirley Hope, Portsmouth, Va.; Dr. C. S. Morley (Homœopath), Richmond, Va.; Dr. J. F. Slade, Reams', Va.; Dr. John P. Smallwood, Lewiston, N. C.; Dr. E. M. Sneed, Overton, Va.; Dr. J. R. Spencer, Farmville, Va.. Dr. C. T. Taliaferro, Elkton, Va.; Dr. William Troy (colored), Hampton, Va.; Dr. Bernard Wolff, Richmond, Va.

Five applicants have been rejected for incompetency dur-

ing the time embraced in this report.

The entire work of the Board during the first four years of its existence may be briefly summed up as follows:

NUMBER OF	F PERSONS E	XAMINED:	
(a) By Board in ses	sion	128	
(a) By Board in ses(b) By individual B	Examiners	117	
.,			
Total.		245	
Number of persons	rejected		. 54
Number of certifica	tes issued		. 186
Number of withdra			
Total.			. 245
Official: By orde			
Sylviat. By order	President M	Med. Ex. Boar	d of Va

President Med. Ex. Board of Ve Hugh T. Nelson, Sec'y and Treas.

Book Hotices.

Treatise on the Diseases of Women. By ALEXANDER J. C. SKENE, M. D., Professor of Gynæcology, Long Island College Hospital, Brooklyn, etc. With 251 Engravings and 9 Chromo-Lithographs. New York: D. Appleton & Co. 1888. Large 8vo. Pp. 966-xiv. Cloth. Price, \$6. (From Publishers.)

This is a most excellent work because it is accurately descriptive of diseased conditions as met with by the doctor, and is practical in all the details of treatment. In short, it is eminently deserving of classification among the works for the practitioner. As to a general division of subjects, the plan of the work adopts a division of diseases of females into three classes: Those which occur between birth and puberty; those belonging to the menstrual period, and those which occur after the menopause. The section on the diseases of the first of these three periods is exceedingly valuable, and is in itself worth the price of the entire book. characteristic of the work is its clinical feature. Typical cases of diseases or derangements as actually met with in practice are synoptically reported so as to fix the salient points of symptomatology, diagnoses, treatment, etc., upon the memory of the reader. We commend this work to the favor of the practitioner who is on the lookout for a really useful guide or text-book on diseases of females.

[We regret the compulsory omission of other book notices

for want of space in this number.]

Editorial.

Southern Surgical and Gynecological Association.

The recent meeting of the above Association at Birmingham, Ala., was eminently successful. A very large number were present, and many valuable papers were presented. Dr. Hunter McGuire of this city was elected, by a unanimous vote, President of this body for the current year. Dr. Roberts, of Tennessee, and Dr. Bedford Brown, of Virginia, are the Vice-Presidents. The Association will meet at Nashville, Tenn., on the second Tuesday of November, 1889.

It is safe to predict, under the able leadership of Dr. McGuire, assisted by Drs. Roberts and Brown, that the next meeting will be a grand success. The Association should

have the best wishes and hearty co-operation of every man in the South. We give up most of our space this month to a report of its recent proceedings. It will be found on examination of the abstracts that the papers were of a high order of ability, and some of them were eminently valuable.

Richmond Medical and Surgical Society—Two Prizes of \$100 Each for 1889.

This Society is doing admirable work in this city, and sets an example worthy of adoption by other local societies as a stimulus to original work and investigation by members. After the election of Dr. Joseph A. White, as President for 1889, Dr. C. L. Cudlipp, Secretary, Dr. M. D. Hoge, Jr., Treasurer, it was voted that a prize of \$100 be awarded during the Fall or Winter of 1889 to the member of the Society who should present the best essay indicative of original work, subject to the usual conditions in awarding such prizes. Dr. Hunter McGuire individually also offered a prize of \$100., open to any member of the Society who might present the best approved essay on any surgical subject of his choice—this prize also to be awarded on precisely the same conditions as might be determined on for awarding the Society prize of \$100., just alluded to. It is scarcely necessary to add that such inducements will most probably result in active competition which will benefit the members who may enter the arena, and will also benefit the Society itself. Either of these prizes is open to competition to new members who may join within the next three months. The membership of the Society at present is between 40 and 50

The Medical Examining Board of Virginia, the Medical College of Virginia, and the Journal of the American Medical Association.

Under the head of "Domestic Correspondence," in the Journal of the American Medical Association, for December 15th, 1888, we find the following:

"THE MEDICAL COLLEGE OF VIRGINIA.

Dear Sir—There has appeared in the Journal several articles reflecting upon the Medical College of Virginia, which are so flagrantly at variance with the truth that the Faculty feel called upon to make the following statement of the facts which the writer in the Journal has distorted in many ways.

It is only in deference to the official position of the *Journal* as the accredited organ of the Medical Association that it is deemed necessary to notice these attacks, for the individual opinions of the author are simply a matter of indifference to the Faculty, being palpably the reflex of an inimical partizanship in this city.

Briefly put, the Medical College of Virginia is charged by

its enemies:

1. With being hostile to the principles of the higher standard of medical education than at present obtained in the examinations of the colleges.

2. With being opposed to the establishment of a State Med-

ical Board in pursuance of that object.

3. That it attempted, through its students, at the last session of the Legislature to amend the law so far as to substitute for it the proposition to exempt Virginia students from

its operations.

In denial of these assertions, it is well known that the Medical College was one of the prime movers in getting the law passed by the Legislature, and, but for the zealous personal exertions of the members of the Faculty, that it would have failed to be enacted. After an experience of two years, it was found to be so very imperfect in many of its features that the Medical Society of Virginia and the Examining Board came before the Legislature asking that it be amended, the Board wishing to have the feature permitting an applicant to appear before any three members individually, instead of the entire Board, abolished, and the Society asking that the number of members of the Board be reduced from thirty to twelve, and that a diploma should be a preliminary qualification.

The students at the time the amendments were before the Legislature were incensed at the action of the Board at its last session when applicants from this College were rejected on account of what they believed was personal hostility of three of the members to the Faculty, and fearing that in future examinations the students of this College would be vicarious sufferers for such animosity, petitioned the Legislature to exempt the graduates of the two State institutions

from the operation of the law.

A committee of the students waited upon the Dean and requested the co-operation of the Faculty in their movement, but were plainly and positively told that the College was committed to, and believed in the principles of the law, and therefore could not aid them in their attempt to abolish it,

or to get its students exempted from its operations. Faculty, however, at the same time claimed the same liberty of opinion in discussing the proposed amendments that were being offered as other members of the profession, and did not concede that an objection to two or three members of the Board implied any hostility to the wish "to elevate the standard of medical education." To emphasize this fact, the Dean was instructed to appear before the Legislature and re-affirm the wish of the Faculty that the law, imperfect and unsatisfactory as it was, should remain in its original form rather than encounter the risk of defeat in contentions over the amendments. Had it been the wish of the Faculty to oppose the passage of the bill, it will not be denied that there would have been any difficulty in defeating it, as a large number of legislators deferred to its wishes in the matter.

The writer in the Journal persists in placing the Medical College of Virginia in a false attitude in stating that the percentage of its graduates before the Examining Board was so small as to establish its meagre teaching qualifications in comparison with other institutions in the country, whilst the facts are, as the following report of the Examining Board [We omit the reprint of this table, which is the same as that printed on page 562, November number, 1888, of Virginia Medical Monthly] will show, that it had the smallest number of graduates rejected of any other College whose number of applicants were equal to it.

It will be seen from the above table that 57 students of this College were examined by the Board, and about 7 per cent. were rejected, but that of the rejected three were reexamined five months afterwards and were given their licenses. The statistics regarding the students from Baltimore, Philadelphia and New York show a rejection of 25 to

30 per cent.

At the examinations in April last the State Medical Examining Board gave certificates to practice medicine to three of the students of this College whom the Faculty the week previous had rejected for not reaching the standard required

by it.

We shall pass by in silence the prophecies of the writer in the *Journal* that the Faculty of the College intended going to Norfolk for the purpose of attacking the Medical Board and preventing its renomination, considering it necessary only to refer its readers to an accurate report of the meeting, where Dr. Cullen, the Dean of the Faculty, seconded

the resolution of Dr. Chancellor for the reappointment of the entire Board, and embraced that opportunity of refuting the misrepresentations in regard to the action of the College, which was received by the Society with great gratification and satisfaction. Dr. Cullen, in substance, stated to the Society what is written here, and added that not only was the Medical College of Virginia in accord with the examining law of the State, but that it would go further than it does and join the Medical Society of Virginia in petitioning the Legislature to compel the two State institutions to have preliminary examinations and a three years' graded course.

I am, very respectfully,

J. S. Dorsey Cullen,

Dean of the Faculty, Medical College of Virginia." To the above letter the following editorial reply is made in the same issue of the *Journal of American Medical Assocition*:

"In another department of this week's issue of the Journal will be found a letter on this subject from Dr. J. S. Dorsey Cullen, Dean of the Faculty of the Medical College of Virginia. The first paragraph of the letter is of such nature that we would be fully justified in refusing to publish it. The English language is broad and flexible enough to permit one to be severe and critical without being offensive or violating its rules of orthography and syntax.

As every one must know, individuality is dropped in editorial writing. It is a well settled principle that the editor of a journal is responsible for unsigned articles. While the editor may not write all that appears in his editorial pages, whatever appears therein has his full consent. An editor cannot allow personal prejudices to direct or influence articles for which he is responsible. Dr Cullen's position of claiming to respect the *Journal*, but at the same time caring nothing for an opinion expressed in its editorial columns, and opening his letter with an offensive paragraph, is, therefore, as paradoxical as his first sentence is ungrammatical.

Whether or not the statements made in the Journal, concerning the Medical College of Virginia, are 'flagrantly at variance with the truth," we leave our readers to judge from the facts already and to be presented. Dr. Cullen states three charges made against the College by its enemies. The Journal is not an enemy of this College, and does not feel itself called upon to take part in a personal controversy between the College and its enemies. It does feel called upon

to expose any medical college that graduates incompetent men; it has that right, and will do so whenever it has the

facts to go upon.

Dr. Cullen seems to have misunderstood the charges made by the Journal against his College. Briefly they were as follows: 1. That it has, with some other medical colleges, done bad work by graduating incompetent men. 2. That it was, at least from January, 1888, to the time the editorial articles appeared in the Journal, opposed to the Medical Examining Board of Virginia. 3. That in January, 1888, the bad work of the College was practically admitted by the fact that the students of the College, supported unofficially by members of the Faculty, went before a committee of the Virginia Legislature and asked that the students of the Medical College of Virginia be exempt from the State Examinations. We did not say that the Faculty of the Colloge was opposed to the establishment of a State Medical Examining Board; we knew the contrary, as shown in the Journal of September 8, p. 346. In the same issue we stated the socalled reasons given by the students of the College to the Legislature why their graduates of the College should be exempt from State examinations. Some members of the Faculty must certainly have seen the preposterous document of the students; and that the students were allowed to stultify themselves by it without protest from the Faculty is at least presumptive evidence that the Faculty considered it a proper article to emanate from their College. The members of the Faculty should have considered it a duty to say to the Legislative Committee that they could not approve of the memorial presented by the students.

The facts already presented in the Journal, including the table in Dr. Cullen's letter, already published in our issue of November 24, p. 746, are proof enough that the Medical College of Virginia has not done good work since January, 1885. The table shows that some other colleges have done worse work; but it is no excuse for grand larceny that some one has committed murder. Dr. Cullen is quite right in saying that the Medical College of Virginia "had the smallest number of graduates rejected of any college whose number of applicants were (was?) equal to it (?)," seeing that no other college had an equal number of applicants by 23. Dr. Cullen finds that about 7 per cent. of the graduates from the Medical College of Virginia have been rejected by the Virginia Board. We believe that 8 is not "about 7 per cent." of 57, but 14.03 per cent. We did not find it necessary to

establish the bad work of this College by comparing its work with that of other colleges; 14.03 per cent. of rejected applicants before the State Board is quite enough evidence of bad work.

If Dr. Cullen wishes to know why more was said of the Medical College of Virginia, in our editorial articles, than of other colleges doing as bad or worse work, we may say that it was because the Faculty officially endorsed the establishment of the State Board of Examiners, and afterwards individually opposed the Board before the Legislature: because of the action of the students of that College in petitioning the Legislature of Virginia to exempt its graduates from the State examinations, and their reasons therefor; because the Faculty did not protest against this petition, and because of the statements made to the Legislative Committee by members of the College Faculty. The action of the students was substantially, though unofficially, it is said, endorsed by the members of the Faculiy (except Drs. John N. Upshur and Geo. Ben. Johnston). If Dr. Cullen does not remember what the members of the Faculty said before the Legislative Committee, we can refresh his memory by publishing their statements. In regard to the misstatements refuted by Dr. Cullen at Norfolk, we can only say that none have been made in the Journal; and as to the statements that we have made, they have been refuted neither at the Norfolk meeting nor in the letter from Dr. Cullen in this issue.

We noted with pleasure the position taken by Dr. Cullen at the Norfolk meeting of the Medical Society of Virginia in regard te the State Examining Board. Inasmuch as he represents the Faculty of his College, until there is evidence to the contrary, we shall accept his action as a promise that the Medical College of Virginia has entered upon an era of

better work."

St. Luke's Home for the Sick

Is a larger institution than is generally supposed. The Lady Board of Managers have published their yearly report in the *Dispatch* of this city. The institution is Dr. Hunter McGuire's private hospital and belongs to him; but the boarding department is under the control of a Board of about twenty prominent ladies of this city. These ladies visit and supervise the management of the house; they employ and control the servants, nurses, etc., make the purchases and pay all bills. They receive the money paid for board; and all over and above the actual cost of running

the house is devoted by them to the support of charity cases. These patients are boarded and treated without charge. Dr. McGuire's fees for professional services at St. Luke's are such as he would charge elsewhere. There are 50 beds for patients in the house. Two resident physicians and seven ladies who are trained as nurses and one or two male nurses are regularly engaged, and special nurses are often required. Miss Walker, a clever and accomplished lady, presides over the nurses. Dr. Hunter McGuire is ably assisted in the management of this institution by his kinsman, Dr. Edward McGuire.

Thompson's Bromine Arsenic Springs Water,

Advertised on the special card-board in front of reading matter in this issue, has established its claim upon the favorable attention of physicians. Among its other virtues, a prominent physician of Thomasville, Ga., has recently remarked upon the value of this water as a substitute for the usual mixture of lime water and milk for sick stomach in fever cases.

Messrs. E. A. Craighill & Co.

Is the style of the new firm in Lynchburg, Va., who are proprietors of Camm's Emulsion of Cod Liver Oil, etc., which succeeds the old firm of Faulkner & Craighill—Mr. Faulkner having retired from the firm.

Typographical Corrections.

In the article by Dr. E. Cutter, and the answer by his son in our December No., there were some errors which ought to be corrected. Dr. Salisbury's Bibliography should have been headed A., and Dr. Cutter's B. Page 621, line 7, strike out No. 9; p. 626, line 3, "Academies" should read, "Academics;" p. 628, line 18, "American" should read, "Armenian;" p. 629, line 22, "physical" should read, "psychical;" line 44, "1-66" should read, "1-16;" p. 632, line 16, "turned up" should read, "tuned up;" same page, line 39, "8x\(\frac{1}{2}x\)\(\frac{1}{2}\)" should read "8x1\(\frac{1}{2}x\)\(\frac{1}{2}\)."

Dr. W. E. Taylor,

Formerly of the U. S. Navy, but for some time past a practitioner of extended reputation in San Francisco, California, was elected Coroner of the city and county of San Francisco, on November 6th, 1888. It gives us pleasure to note such honors bestowed upon our subscribers and friends.

The position of Coroner of San Francisco is a very important office, and much more of a distinguished professional honor is attached to it than to the office of like name in most of our eastern cities. Dr. Taylor will fill the office well, and with high regard for his professional position.

Mellier Drug Co. Prescription Books.

Every doctor wants his prescription blanks in a convenient form. The Mellier Drug Co., St. Louis, Mo., authorizes us to say that one of their neat prescription books will be mailed to the address of any physician who may apply for the same and name this journal. It won't cost but a postage stamp to make application. On the third cover of the the book is a very convenient calendar for 1889, and on the second page is a useful table for calculating at a glance the probable date of confinements when the date of the last menstruation is known. Each book contains about 50 prescription blanks which can be torn off by a perforated line, leaving a small stub on which a memorandum may be made relating to the prescription written. It is a good thing.

Why Not Vin Mariani?

The Paris correspondent of the Wiener Freie Presse quotes the following regarding the critical analysis made by Dr. Fauvel, the noted Paris laryngologist, in reference to Mackenzie's book, "Frederick the Noble": "That which most surprises me is the fact that medication played a secondary rôle in the management of the case. I would have recommended the employment of Coca Mariani to rouse the flagging energies of the patient. My investigations, dating back to 1865, establish the fact that coca is a potent agent in combating debility. I have also shown that the injection of concentrated coca (Thé Mariani), has a salutary influence on the larvngeal mucous membrane, alleviating pain and congestion. In Europe this remedy is relied on in cases of debility and where pain is a prominent symptom. As further proof, the case of General Grant is cited, in which Doctors Fordyce Barker, Geo. F. Shrady, J. H. Douglas and Sands were active. Coca was employed in this case with success (the preparation exhibited being Thé Mariani), and it was stated by the attending physicians that without the use of this drug the General would not have been physically able to undergo the strain incidental to the work of finishing his Memoirs."—Berliner Tageblatt.

VIRGINIA MEDICAL MONTHLY.

VOLUME XV-No. 11.

WHOLE NUMBER, 179.

RICHMOND, FEBRUARY, 1889.

Griginal Communications.

ART. I.—A Criticism of Modern "Physical Culture" and Popular Athletics. By GEORGE BAYLES, M. D., Orange, N. J.

Public and private life have been pervaded of late years with the athletic impulse to a very remarkable degree. It has some of the features of the revival in the art world, and is probably due to similar causes. Athleticism has become a prominent, and, perhaps, established expression of energy in lands where modern culture prevails. At the present time the sentiment in favor of, and the inducements towards, eminent athleticism are accepted with such eagerness and alacrity that athletics have become a veritable cult, and with the more enthusiastic a fetich.

Theoretically, we cannot condemn this sentiment and practice; but, practically, there are some grounds for thoughtful questioning, perhaps for grave concern, and, may be, a call for caution and respectful protest, lest this apparently benign impulse be carried too far, and thus become a source of evil to the welfare of society and a hinderance to the healthful development of our bodies.

It is certain that the good that may be contemplated and

sought to be realized by the more ardent advocates of athletics of our times is not all good, because their teaching and example are bearing some fruits that are more than suggestive of abuse, having some direct as well as indirect influences prejudicial to sound mental and physical health.

Arising from such observations as I have been able to make in this department of human activity, there seems to be a precipitate and incautious progress in the art of physical culture which is doing harm. I have not looked for nor consulted a single published treatise or article in support of what I shall herein present. I shall be solely responsible for what I offer by way of legitimate objection to the prevailing ecstasy of popular interest in physical exercise, and in the vigorous, not to say violent, sports of the times.

I suppose the world is as unready for an appeal of this nature as it is, at present, inconsiderate in the indulgence of its many passing whims and fancies. "The world moves," and we must, indeed, be careful not to obstruct the wheels of progress. If, however, the wheels need a brake, perhaps there will come, in time, an appropriate way of popularizing caution, moderation, and discretion without earning for the monitor the uncomplimentary term of "crank." There is the materialistic side of every question, and the true or normal and fully equipped physician is a materialist, as has been demonstrated most philosophically and logically by the presidential address of Dr. William T. Gairdner, of Glasgow, at a recent annual meeting of the British Medical Association. If we, as physicians, have a prerogative as students and disciples of nature, then surely we have the privilege, if not the duty, of measuring and estimating all things by the standard of the naturalist. "We see Bacon opening his Novum Organum by ascribing to man the position of minister or servant or interpreter of nature—the idea being very likely borrowed from Hippocrates."

As naturalists we are in a positiou to criticise, (within the domain of the materialistic) all acts that are voluntary on the part of those who are our peers and comrades in the

scale of nature. Hence, to criticise unfavorably presupposes a knowledge of some attempted perversion of nature's scheme and violation of her benignant laws.

If the vitalized mechanism, called man, had not its appointed and definite limits of toleration and endurance, then we might, in all honesty and gladness, join in the "hue and cry" for advanced athletics. If the human machine had not its prescribed limits for strain and adaptability, beyond which all will be overstrain and misdirection, then we might well afford to be muscular enthusiasts. We know that the human frame and its enclosed organs have very intricate and dependent relations. None of the vital parts of our organism partake of the general, comparative passivity and insusceptibility that are ascribed to the bony frame-work and its muscular envelopes. Were it otherwise, then, indeed, we might be truly gratified to see so much good work done for us, for we physicians have a real and unselfish regard for whatever improves health and the physical well being of every individual. What may be attained in course of time —perhaps of years and generations—by careful, consistent and diligent personal training, by a system not yet generally recognized as desirable or needful, is not the question we are at present considering. We propose to inquire what the masterly strivings of our ardent athletes (found everywhere in the rank and file of our communities) is bringing about. Our observation would almost lead us to conclude that the end and aim of modern ideal athletics is supreme proficiency and successful competition. Medical men canwisely sanction this object, knowing not so well what it implies.

It is not the modest trial of strength and endurance existing by virtue of an inherited quality and an appropriate training, such as we see illustrated in the celebrated racehorse "Maud S," who is occasionally allowed to "break her record" without the injurious excitement of a violent contest or a competitive trial of speed on the race track, but rather the prodigious, unusual, unnatural, hysterical lunge of the excited gamester in his "spurt" or frenzy of effort to attain the winner's honors.

In the process and progress of athletic training there is much that is beneficial and wholesome, but such education has no true mission beyond what is beneficial and wholesome. The spirit that stimulates the imagination and incites to feats of phenomenal endurance, of exceptional strength, and an alertness of action that belongs by right of endowment only to the lower animals, and which realizes nothing more of satisfaction than a momentary success—a flush of victory—nor any less of evil than a distressing reaction—the price of victory—is a spirit to be disallowed and suppressed.

To this thesis I address myself with earnest hope that every philosophical, physiological and philanthropical argument may, some time, be brought to bear upon this subject, so that its evils may be lessened in a great and wholesome

degree.

The leading exponents of the power and force of muscle are oftenest those whose impecuniousness or vanity, or both. have been induced to trade upon their animal endowments and to become the so-called "professionals" of the sporting These include the pugilist, the pedestrian, the professional experts in riding, swimming, dancing, the acrobat. etc. The education of the prize-fighter naturally proceeds from his hard and rough experiences in the world from infancy up. He has been buffeted by the world from his very beginning, and he has readily learned to buffet the world in retaliation. The prize specialists in the ring and elsewhere have had a training and education consisting of serious conflicts with the circumstances and hardships of a life of many deprivations, and they readily turn their hardearned accomplishments to a brief and often profitable ac-The result of all this to the man of eminent muscle is a great waste of energy and physical prowess, a speedy extinction, and nothing that it ever was or assumed to be can be utilized for any practical advantage to mankind. This is a true but sad commentary upon what is so often lauded as the highest type of muscular efficiency, and worthy of emulation in its strictly physical aspect.

We have seen that these objects of admiration of our

nervo-muscular times are generally born in penury, are toughened by privations, and have turned the physical results of their struggle for existence to a certain pecuniary benefit. They are bankrupts upon any other plane of human activity, and they are very soon bankrupt upon that which is their chosen plane.

Apply these examples to the more favored youth of our land who are much too greatly interested in the "manly art" and the successes of the public athlete and prize competitor, and we see a growing preference for matter over mind, which, in its essence and its practical results are, in the highest degree, baneful. Our criticism of the professional athlete has its useful side only in its relation to the excitements and sentiments it tends to create in the minds of a class in the community that may be contaminated by them. The class that appears to be the most liable to have its hopes, habits and aspirations influenced by the artistic. professional and prize athlete is the one that can, by reason of its relation to wealth or "easy circumstances," the most freely patronize the centres of athletic activity, and, in part, support the same by many forms of contribution.

What we fear is emulation inspired by such a vulgar, ill-conditioned and immoral influence, and the verity of such an influence is shown by the readiness with which the slang of the slums is popularized and incorporated into the language of those who should be polite. The fortunate and really valuable youths of the land constitute the class which is most ardent, and often reckless in its admiration of the classic models of the regimé of muscle, so that it is of the first importance that the malign influence be moderated or altogether subjugated for the benefit of that class, to say nothing of other advantages to the community in general.

Leaving the higher types and descending to those that offer to our youths examples of proficiency that are by them easily attainable, we encounter the usual every-day field sports. Riding to hounds, polo, tobogganing, base-ball, competitive rowing, cycling, foot-ball, tennis, "hare and hounds," these and athletic sports of strength and endurance, such as jumping, putting the weights, etc., etc., have much to com-

mend them. But alas! the limits of the safe are not sacred from violation. So far from being secure from violation, the limits are constantly being overstepped to the production of sickness and the reduction of the general standard of health through hurtful exposure and overstrain.

In our suburban communities especially, where wealth and fashion exist, and field sports are fostered with great zeal and animation, a popular physician has abundant proof of evils which confirm all his objections to field sports. In varying degrees it is much the same all the country over.

Polo has furnished a goodly number of concussions, fractures, ruptures, contusions, etc. Riding to hounds has done the same. Base-ball furnishes the same, and many severe forms of acute disease beside. Competitive rowing gives the heart an overstrain, and the nerves a fearful tension-spasm under the excitement of the supreme moment in many cases, from which we see few perfect recoveries. Cycling, beyond the bounds of very moderate exercise, tends to the production of many cases of chest and pelvic disorder; also unequal and asymmetric muscular development, and, in the stage of inexperience with the machine, many serious bodily injuries from falls and collisions. Foot-ball has been especially prolific of serious bodily injuries, some of which have abridged life, and others rendered life a burden.

The boys' games requiring hard running have given to the physician many bodily disturbances to remedy, chiefly arising from the great physical exhaustion that is suffered by a plucky, but delicate, rapidly growing boy. We would be glad to have no indictment to urge against skating, to-bogganing and lawn-tennis. In these games both sexes take a like part, but not with like benefits or equal disadvantages. The game may be inexpert and tame, and hence be comparatively harmless. Whenever an "event" is on the programme all the conditions are changed, and quite commonly for the worse.

The dangers of the hour reside in the weather that is not just what it should be, the style of dress that does not sufficiently protect, and an indulgence in an agility, both prolonged and exhausting, that is not commensurate with the average strength of the individual.

In times of skating and toboggan sliding, an intense and almost paralyzing cold is most likely to prevail; such exposure cannot be safe. In spring, moisture of the turf and chilling breezes are the usual accompaniment, and such exposure cannot be safe. In summer the oppression and often dangerous heat of the atmosphere, and in autumn, atmospheric heat with great humidity, are often too trying for ordinary human endurance under the stress of any extraordinary activity.

With these mere regular seasonal conditions, come every variety of accidental circumstance within a rather wide range of possibilities in our latitude. Therefore, when we take into account the often unfavorable meteorological conditions, added to the too sudden cooling of the body, after very violent exercise or too great exertion, when the body is not in a proper state to bear it, we have reviewed an aggregate of circumstances that has quite deprived physicians of a disinterested enthusiasm for these popular sports.

Of course these strictures apply with the greater force to the "tournament" occasion, or the "event," as it is termed; but these are, in point of fact, so frequent and so hotly contested, that the attending evils seem to be an unvarying accompaniment of the games. Nor do the audiences escape unharmed. Some of the severest neuralgias, congestive chills, pleurisies, pneumonias, rheumatisms, attacks of bronchitis, erysipelas, diarrhæas, dysenteries, uterine disturbances, and acute catarrhal seizures that we have seen, have been the direct and immediate results of protracted exposures under the intense excitement experienced by the sympathetic visitors and on-lookers of the field and lawn sports.

Is all this of no great consequence? Well, if our professional mission contemplates the lessening of bodily ills by protection from their causes, we cannot be very loud in our approval of open-field sports carried on with conventional ardour under the modern system. The sickness and untimely deaths due to the conditions mentioned, make an

enormous factor in the sum of human misery among the very class to which we are in honor bound to give a most enlightened attention and timely warning. If we seem to have over-stated the common results so detrimental to the bodies of those who are devotees of the prevailing open-air social pastimes, it cannot be because the instances are altogether exceptional that have given us our impressions. The multitude of facts make it very difficult to indulge an over-statement. Our people are not sufficiently supplied with latent physical stamina, or advanced in preliminary bodily training to cope with the exactions of the times in matters of competitive sports without unfortunate results-

The popular sports of the day, with all that they involve. consume a great amount of time. The waste of time is to be found in the diversion of energy from that which is useful to that which is essentially useless, e. g.: to that which simulates pleasure and recreation, but with no beneficial consequences. It is nothing in extenuation of the situation to say that the pastimes are the agreeable occupations of vouths and favored ones, who have no cares, no important objects in life, no weighty responsibilities, and no urgent obligations. No being who enjoys the consciousness of sanity ought to be careless or purposeless, or free of responsibility and obligation. Indeed the sense of such individual responsibility in all departments of human ethics should reach such a degree that would change the pleasure derived from the average time-consuming sports into little less than a positive pain, if indulged frequently, or with the elaborate accessories that are usually lavished upon them.

This is not a surly arraignment of the pleasures of youth. Alas! how little actual youth and tender adolescence have to do with the toboggan slide, the regatta court, the polo field, and the tennis court, in their social and club aspects!

As the children are banished to the realms of humble joys, the innocence and gentleness of childhood are relegated to the same unambitious territory. Systematized pastimes of the day are mainly the sports of the adult—not of childhood. The innocence is the innocence of Wall street and

the political caucus, while the energy is the energy of infancy grafted upon that portion of a life-time that should know and better appreciate the pleasures of sedateness, moderation, and a more stately grandeur of deportment than is supposed to reside in the nursery, the play ground, or the infant school. Therefore I submit that it is a misuse of time, at a time belonging to greater and more serious affairs to import into middle life the giddy, romping, boisterous pastimes of children and immature young people. It is unnatural to make the toilsome, reckless, impetuous plays the common recreations of men and women of these times.

In refined and esthetic circles the every-day luxury of living should be the normal complement of dignified repose and a decent decorum of muscular effort; not the exalted bursts of frenzied energy that, at times, characterize the sporting arena. The two conditions are radically opposed; they are physiologically incompatible, and tend directly

and speedily to bodily and mental depreciation.

In the line of recapitulation, then, we see that, coincident with these irregular and abnormal forms of athleticism, we usually find every arrangement and incident of life tending in a direction to aid and complete the moral and physical weakness and disorder that they introduce. The impulse and impetus given to latent disease belongs especially to our review. The diseases that are engendered by exposures and too great drafts upon the physical powers generally, are numerous and grave. Let us try to realize that our people are what we find them, not a little enervated by a few decades of almost absolute comfort and luxury of living. We have not been recently lifted out of a state of vigorous savagery, nor been handed down the centuries unimpaired from a Spartan ancestry and a Spartan schooling. We have seized the fashion and the fever from the countries that for many generations have had habits of thought, speech, and acts of life in measurable conformity with a great inclination for play, the most childish social pastimes, many holidays, and many easy-going ways with reference to the earnest purposes and duties of life. It is with ourselves quite an acquired taste, and we

relish it according to our various personal biases towards that which is agreeable because it is foreign.

Something that we ardent, impetuous North Americans are ignorant of forbids all this. We are undertaking something for which we are physically unprepared, and for which we, as a people, have had, since colonial days, but very inadequate training. Our approach to the goal of our sporting ambition has been abrupt, while it should have been gradual and very slow. Our interest is not of a natural orderly development, and hence is not genuine but assumed. A fantasy has possessed us, grounded upon the low bases of fashion, and an ill-formed and inconsiderate sentiment. What can be accomplished under stress of unusual or phenomenal effort, is not what should be done in the sobriety of sound sense.

To define the deterrent under currents, we, as reverent disciples of biological science, look to our note-books, our correlated experience, and our medical literature. There certainly does exist what is known to physicians as the "newropathic tendency." It belongs to the race as an evolutionary legacy, and is either a progressive or a degenerative metamorphosis, as the case may be.

No one has shown in what this predisposition lies, nor is there any recognized pathology in that department of the neuroses that we regard as functional. Contamination somewhere in the course of ages has left a permanent sign and blight, and every health-force of nature that ever exerted its power, either for the general or individual good, has not been able entirely to eradicate this tendency.

By reason of climatic, political, and other causes, this neuropathic tendency may be said to have been greatly attenuated in some regions of the globe, and notable differences exist in this particular in various portions of the world.

With Americans the tendency is especially established, and marked for reasons that are associated with our history and circumstances, as a people from the early colonial period to the present. That it will abate under favorable

conditions is quite probable. The benign influence of temperate physical and mental action, sobriety of sentiment, completion of foundations and enterprises, settlement of politics and principles, and the final mastery of exciting and troublesome social problems, will tend powerfully to allay our new-world unrest, and advance our emancipation from this fateful neuropathic tendency.

It is, probably, only a question of time with us, as it has been with older civilizations from which we have derived our habits and inclinations as a heritage in a lump, before this "new-world unrest" is to be properly divided, assorted,

and assigned, as our experience dictates.

We are yet in the period of our national youth, and our exuberance of spirits, our foibles, follies and errors, are characteristic of youth. Still, as national youths, we have our hard lessons to learn, and our trials are none the less severe because of our youth. Under this prevalent neuropathic tendency, to yield to some of our peculiar temptations or to imitate all the deeds or provincial habits of our older brethren, is surely unwise, and should not go on without firm opposition and vigorous protest. Training up from the lowest point, in a systematic and reasonable way, in unison with the gradual repression and diminution of all present peculiar communal disadvantages will, in time, put us far in advance of anything in athletics that has ever yet been attained. But, of course, we should make haste slowly.

The place for the beginning of hygienic athletics is the nursery, soon after graduation from the cradle. Intelligent exercise of the bodily functions and powers so early in infantile life, is a method almost, as yet, unthought of. The child's nurse, or "care-taker," is not instructed in reference to any formulated system of infantile athletics.

Often enough, in more advanced childhood, some school-teachers, under the stimulus of a popular sentiment within their special circles of educational influence, will devise and practice a feeble inefficient course of calisthenics. As at present practiced, this is often most hateful to the average

child, and all because it is not acceptable in form, nor rational in its application. If the neuropathic tendency were duly appreciated by parents and teachers alike, then the system proper for each individual child would be devised and carried out conditionally. For all that may happen in after life, it is important that a right foundation should be laid. A more than laudable desire to excel in gymnastics is fostered under the cogent teachings of the open-air clubs—the sports of the field—and the sage utterances of the millions of those who are under the spell of the modern athletic craze.

It is, therefore, of the very highest importance that the basis of a sound bodily system be laid in infancy; first, to counteract hereditary disabilities; and, secondly, to stand the strain of life's exactions with all due preparation. One aspect of the subject suggests this pertinent point, viz: That there is an element of great waste of physical force in the expended energy of modern sports. When sport is made labor, and labor is diverted from its channels of usefulness, it is fair to analyze the subject with some rigor. Mark the point taken, when sport is made labor.

This special phase of our social economies has been something that has impressed me for a long time. The sportive element of sport has long ceased to be a significant feature, and in some instances has ceased altogether. "fun" element gone, the real pleasure is gone. All minor games or romps, without the ingredient of sport or fun, is labor; and then, by the same token, it is labor misapplied. We have also had occasion to observe that it is not only labor, but great labor. Compared and contrasted with the employments, and avocations of ordinary life the modern pastimes are the most laborious of our labors. Divested of pleasure, pursued with reckless zeal, urged to the point of mathematical precision and exactness of results, refined to the most subtle extreme of conformity, with arbitrary or perhaps scientific rule and action, it is nothing now but the most unrelenting and cheerless labor. Besides this, it is labor that, being diverted from useful channels, has no moral or physical compensations. What advantage is it to

a boy, instinct with life and bodily energy, whose avidity for muscular action is akin to "perpetual motion," to train for championship in modern athletic sports? What man, having a boy's nature lingering within him, and even active to the point of fatigue in the conduct of his daily business, can find advantage in training for high position or prize honors in the modern athletic arena? What girl or woman, with ever so much untamed and exuberant vivacity and animal vitality, has need of high-pressure athletics after fairly doing her whole duty in the home, the school, the shopping circuit, the nursery, and the social circle? Every provocation, in the every-day lives of these classes, fully stimulates their bodies to the performance of all the exercise that they are competent to enjoy, and from which they could experience benefit.

How can we add to this the inordinate urgency and toil of the modern athletic field-sports and expect anything but injury? Temporary exhaustion of vital force will be the inevitable consequence, and repeated exhaustions are highly pernicious, even deadly. Undoubtedly appropriate training from babyhood would meet, with comparative ease, all the demands of exacting modern laborious sport, but who can perceive utility in grafting such superior training upon a naturally active, bustling, busy, ardent life, such as is the birth-right of our middle class millions? They are worked enough now for all the prosperity that can accrue from brain and muscle. We must acknowledge, therefore, that there is a great and vicious waste of physical energy in the pursuance of modern athletic sports save with the very few and altogether exceptional persons whose real and honest duties exact from them no bodily efforts equal to their ability. No doubt a few such exist, but it would be a task indeed to find them in North America in the nineteenth century. Not to weary you by a too searching examination of all the points of interest that the study of this subject will gradually and surely reveal, it is enough to say that within the ranks of the goodly army of medical practitioners of our land hardly one thing is so unanimously regarded as primarily essential for our active and intense people as repose.

We ruthlessly sever the connections between our patients and their avocations; we put our patients into wildernesscamps, and upon the sea for monotonnus voyages, simply for the mental and physical repose resulting from the dullness of all their surroundings when so situated. This shutting off of all the usual excitements of life is the essence of repose. It substitutes a salutary quiet for a virulent agitation of body and mind, and it is correspondingly remedial. The times in which we live call for vastly more of this hygienic repose than many of us have begun to realize; and a few cases of the right kind, rightly treated, put us in a position, not only to fully appreciate this truth, but to prescribe that course of life that provides a corresponding amount of inaction, or a recuperative rest, for every expenditure of mental and bodily exercise to a point that unaided nature is able to cope with and make beneficial.

Healthful repose and an extremely high order of intellectual and bodily activity are not compatible. By this we mean, of course, a high order of mental or physical athletics according to the modern interpretation.

Without repose, both normal and adequate, nothing is stable or safe, and the higher athletics, when associated with the drift of common, every-day life, provides no scheme of healthful or recuperative rest.

I shall have been most unfortunate if I have inadvertently created the impression that I disparage all athletic exercises and sports. I sincerely trust that what I have said has not conveyed such an impression.

The ideal development of mind and body certainly demands a rational system of calisthenics. Such a system should be inexpensive, adapted to peculiar individual cases, only moderately exciting, moderately fatiguing, and in all respects physiological and hygienic. Such a system has not, as yet, been perfected. It contemplates proper normal development from the cradle to full maturity. Any system that I have ever seen—either theoretically advocated or practically adopted—has concerned never more than one segment of the circle of an average life-time. Incompleteness is, as yet, the fault of all favored systems.

What undreamed of heights of attainment in athletics would be normal as well as permanent under a perfect system applied to common life, no one can conjecture. That it would be far beyond what we now consider quite extraordinarily high, and that it would be at the same time safe, wholesome and life-preserving would not be an unreasonable expectation. This kind comes of a correct system long employed, and, doubtless, is one of the good things that will signalize and enrich the future.

When anything having good as a basis is popularized to a point that fashionable society would term "a craze," it is by that process most liable to become erratic and full of offenses against the welfare and good taste of society. Judged by our present national and home-made standard of polite social obligations and preferences, we find the athletic frenzy of the day leads to folly and injury.

ART. II.—The Tongue in Health and Disease.* By M. D. HOGE, JR., M. D., Surgeon First Brigade Virginia Volunteers, etc., Richmond, Va.

It will be somewhat difficult to say exactly what a healthy tongue is, because there are so few of us who are, in the truest sense of the word, always perfectly healthy, and there are few who do not suffer from indigestion, constipation, lassitude or mental fatigue.

A healthy tongue must not be too blunt nor too pointed; on protrusion it should be steady, not jerky nor trembling. It should be of a delicate pink color, without congested or white points.

While it is a mistake to think, as some have, that the tongue is a diminutive map of the diseases of the body, divided into little squares, corresponding to some organs as, the lungs, liver, spleen, intestines, kidney and brain, still it is

^{*} Read before Richmond Medical and Surgical Society, January 24, 1889.

^{*}Auth rs referred to in preparing this paper: Dickinson, in Brit. Med. Journal, March and April, 1888; Zeigler's Pathology, Ringer's Therapeutics, Bar holow's Materia Medica, Bartholow's Practice, Flint's Practice, Beale's Slight Ailments, Hunter's Surgery.

to some extent an exposed portion of the digestive tract, and as such, deserves special attention in diseases of the alimentary system. It presents sometimes strange contradictions; and in such cases it is more often an index to the general effects of disease rather than a particular one, and should then be looked upon as a guide to treatment rather than to diagnosis.

There are some dozen or more adjectives descriptive of the various phases of the tongue, but for convenience we will divide them into, dotted, coated, plastered and furred.

The dotted tongue shows in the central portion here and there white dotted points of horny epithelium, while the rest is natural in color. It indicates generally a loss of appetite, and is seen very often in chronic diseases with no rise of temperature. This form with a slight coating towards the base is frequently associated with nervous diseases. There is also generally a lack of saliva.

The coated tongue presents a continuous white coating over the whole surface. It is found in most all cases of acute disease, especially those accompanied by moderately high fevers.

The plastered tongue is the condition of an aggravated coating, which is most and permanent. It is an indication of recent and severe disease, as, for example, pneumonia.

The furred tongue is when the papillæ are lengthened and present a hazy or fringed appearance with foreign matter collected between. The dry form is more frequently met with than the moist, caused principally by dehydration, as in diarrhea or a dry diet.

The strawberry tongue of scarlet fever is probably due to injection of fungiform papillæ; while the black tongue of typhoid fever is possibly caused by hæmorrhage.

A dry tongue has from time immemorial been looked upon as a bad sign; and a recent English author, from a large number of special observations, concludes that very nearly fifty per cent. of patients with a dry tongue die.

As to its causes, we may name increased evaporation from the open mouth, as in coma and extreme weakness, obstruction of the nasal air-passages, and diminished secretion of the salivary glands.

When the temperature of the body rises, the moisture of the tongue diminishes; when at 104° it is most generally

dry.

Abstraction of water from the body, either by withholding fluids or excessive discharges, will cause more or less dryness of the tongue, as in dysentery or chronic diarrhea, cholera being an exception. Also we find dryness in diabetes mellitus, exhaustive suppurations and advanced phthisis.

There are some drugs which produce this effect also, such as arsenic in large quantities, atropia and belladonna, hyoscyamus, duboisine, opium and morphine; while such drugs as the aromatic bitters, the alkalies, mercury, tartar emetic, astringents, jaborandi and muscarine increase the flow of

saliva, and consequently moisten the tongue.

We find a white coated tongue in the following diseases: Cholera morbus, typhlitis, enteritis, peritonitis, abscess of the liver, pneumonia, moveable kidney, perinephritis, spinal meningitis, yellow fever, diphtheria, hay fever, intermittents acute rheumatism, gout and dyspepsia.

A yellow coated tongue is found in congestion of the liver, acute yellow atrophy of the liver, variola, invasion period of

scarlatina, erysipelas and acute gastritis.

Other diseases of the tongue are, actinomykosis, amyloid degeneration, atrophy, cysts, teratoma, lipoma, fibroma, myxoma, sarcoma, carcinoma, glossitis, leukoplasia, makro-

glossia, prolapsus, ranula, syphilis and tuberculosis.

And now, Mr. President, in conclusion, I would suggest, in order that something practical may result from this paper, that each member of the Society set apart a page in his note-book and note down carefully the condition of the tongue in all cases he is called on to treat, stating any complications, such as fever, etc., at time of observation, that this large material may be handed over to a committee, for classification and tabulation, to report to the Society later on in the year.

ART. III.—Is Tuberculosis Hereditary?* By HENRY P. WENZEL, M. D., ex-President Rock River Medical Society, etc., Milwaukee, Wis.

Is tuberculosis hereditary? has engaged the attention of the profession from Hippocrates to the present time, and to-day the question is not wholly solved. The death-rate from this scourge is one-seventh of all deaths, and two-thirds of all chronic cases are tuberculous (Hirsch, Eichhorst, voliv.) No class or race of people escape its ravages, no land is free from its taint, and no locality exempt from contributing its quota of victims. The infant scarcely born and the dotard tottering toward the grave, form the extremes of the victims, and no age between these is exempt; both sexes contribute; the first-born is not saved, and the balance do not always escape.

Since the experiments of Erciloni fully prove that the fœtus in utero is perfectly independent of the mother, so far as the nervous and muscular supply is concerned, and since the placenta is joined wholly for nutrition of the fœtus, serving as diaphragm or dialyser for blood purification and for osmotic action to assist nutrition, intra-uterine infection of the fœtus, with tuberculosis matter, is practically impossible.† And in all the vast literature of tuberculosis, phthisis or consumption, but a single case of congenital tuberculosis is on record (Virchow's, reported by Fränkel, Hbch, d. k. Krhten., Gerhardt, vol. 3, I., p. 170.) While we admit a remote possibility of such infection, a much more rational explanation is feasible based on; the very close relations between the infant and its mother, the nursing, coddling, kissing, repeated many times daily; the continued infection of the child's atmosphere from the tuberculous pulmonary cavities of the mother by expectoration, which, in most instances, the child is compelled to breathe continuously, and which soon show their deleterious effects on

^{*} Read before the Rock River Medical Society, January, 1889.

[†]Birch-Hirschfeld (*Muench. Wochenschr.*, No. 42, 1888,) in experiments on animals, succeeded in infecting the fœtus, anthrax germs being the infective agent used. The maternal side of the placenta was filled with spores, but the fœtal division of the placenta contained but few of them. (*Am. Jour. Med. Sci.*, Jan., 1889.)

the soft infantile tissues. Example: "An infant, whose mother died from pulmonary tuberculosis, survived her but a few weeks. The mother's mammæ and nipples were not tuberculous; the child's abdominal viscera were but slightly affected. The mother had been observed coughing frequently in the child's face, and its lungs were extensively diseased, particularly at the root. Eight weeks before death there was entire absence of physical signs of the disease in the child."—(Thomson, Edinburgh Med. Jour., October, 1888; Am. Jour. Med. Sci., December, 1888, p. 649). Of course, it cannot be denied that the mother transmits her taint to her offspring; but no one would insist upon the bacillus tuberculosis, or its spores, being inhabitants of the ovum

before, during, or post impregnation.

My records of 2,000 life insurance examinations, show 31 applicants, representing 31 families with a phthisical history, and in 4 the heredity could be traced to the grandparents; all doubtful cases are omitted. In one case the paternal grandfather died of phthisis; the father died of "old age" at 71; three sons and one daughter died with consumption, and the fourth son is now in the last stage of it. The maternal side of the family is free from taint; all deaths between 28 and 40 years. In another, the mother's mother died of phthisis; her daughter died of the same trouble; the daughter's children, all under 20 years of age, showed no signs of the disease. In a third, the maternal grandmother died of phthisis at 52; three of her daughters died under 40; a son between 40 and 45, and two granddaughters died under 30, all from consumption So far the grandsons have been exempt. In a fourth instance, the maternal grandparents both died young from lung trouble, (?) leaving only one child, a daughter, who married and gave birth to four sons and one daughter. The sons died from phthisis at the ages of 27, 28, 31, and 32; and the daughter, not yet 35, is in the last stage of tuberculosis. The mother is 64 years old, and in excellent health; the father's health is excellent, and there is no hereditary taint in his family. The paternal side of family 2, 3, and 4 removes) is free from tubercular taint. Of 31 applicants, 9 fathers nine were alive

and well at ages from 54 to 77 years; four died of "old age" at 71, 76, 76, and 78 years; two of general debility at 66 and 68 years; one of heart disease at 57; one of jaundice at 47; one of typhoid fever at 76; one was killed at 30, and 11 died of consumption at the respective ages of 39, 42, 45, 46, 47, 47, 49, 51, 53, 54, and 62 years. Thirteen mothers were in good health, aged from 43 to 76 years. Two died of "old age" at 72; two of typhoid at 54 and 55; two of dropsy (?) at 49 and 63; two of cholera at 38 and 40; one of unknown cause at 63; one of "accident" at 43; and eight died from phthisis, aged 32, 39, 42, 42, 45, 48, 54, 65 years.

These 31 families had 138 children ranging from infancy to 58 years; 78 were males, and 60 females; 59 males and 39 females were healthy, and 19 males and 21 females had

died prior to the examination of the applicants.

Of the males, one died of brain tumor at 30; one of rheumatism at 30; one of basillar meningitis at 30; one of tubercular enteritis at 33; seventeen died of phthisis, one at 21, one at 25, one at 27, three at 28, two at 30, one at 31, one 32, one at 33, one at 45, one at 50; the exact ages of two could not be ascertained; and one has since died at 27. Of the females, one died of diphtheria at 10; three of typhoid fever, two of dropsy, (?) both under 30; one was burnt to death; fourteen died of phthisis, one at 20, two at 22, one at 23, five at 26, one at 28, one at 48, three between 20 and 30, and one is now in the last stage of it.

Summing up, we have five grand-parents, two grandaunts, two aunts, one uncle, twelve fathers, eight mothers, 18 brothers, and fifteen sisters dead from inherited phthisis—63 cases. General debility in the father (2) gives three cases more; "dropsy" (?) in the mother, two cases more; death by "accident" adds one case; and one case, whose father died of jaundice and the mother died from an unknown cause, equals a grand total of 67 cases dead from phthisis in three generations, the last not more than half passed.

Dr. R. Thompson, in 80 families consisting of 385 persons found 194 phthisical; 37 died in childhood, leaving only 154 exempt.—Powell Dis. of Lungs and Pleura.

The inherited predisposition to phthisis is greater among

females, the ratio being 57 to 43, while for both sexes the average is about 48 per cent. Three thousand male cases taken consecutively from the Brompton Hospital records, give 36 per cent. of family history of tuberculosis, and of an equal number of female cases, 58 per cent. had such histories. According to the statistics collected by Quain, Cotton and Fuller, the lower classes in England show an hereditary predisposition of 25 per cent.; and Williams' figures, from among the upper classes of the same country, show, in 1,000 cases, 12 per cent. direct hereditary predisposition and 48 per cent. family predisposition.

The most fatal time for offspring from tuberculous parents, or with hereditary predispositions, appears to be from the first to the eighth year, affecting both sexes about alike. Neuventter's collection of 210 cases of miliary tuberculosis, of which 107 were acute and 103 chronic cases, shows one case at 10 weeks of age; under 1 year, 18 cases; between 2 and 4 years, 101 cases; between 4 and 8 years, 60 cases, and 31 cases from 8 to 14 years of age—conclusively proving the assertion that tuberculosis is most virulent during the first dentition.—(Fraenkel, Gerhard Hbch. d. k. K'heiten, vol. 3, I., p. 170).

The predispositional transmission is more common from the maternal side when but one parent is tuberculous, whilst direct transmission leaps from mother to daughter, from father to son. Pollocki says: "The influence of hereditary predisposition is far-reaching, and that out of 179 cases, only 34 could positively declare absence of the taint of family heredity." And Williams avers: "The peculiarity of symptoms are of less moment than the influences they exercise over the age of attack."

Some constitutions resist disease better than others, and better at one time than at another. The soil must be favorable, or the seed fall on barren ground. Besides the hereditary factor of tuberculosis, it is easily acquired. For one author says the hereditary influence, leading to phthisis, has been regarded as attributable to contagion from the parent, subsequent to birth.—(R. Douglas Powell). But the hereditary taint depends on the make-up: using Powell's

words, "A man is built; the integrity or otherwise of the tissues, of which each part of his body is made up, and the wholesomeness or otherwise of the juices with which they are bathed, the sum of his vital forces, his cell-quickening power, which shall bear the call of judicious expenditure for a long but a brief period of time.—(Powell, l. c. 193). That the disease is transmissible like syphilis, is yet subjudice. Scrofulous glands, bones, etc., show the hereditary predisposition fanned into flame by local injury and in fection.

The ova and spermatazoa in the higher animals, are parts separated from the maternal and paternal bodies, both contributing to the development of the new being. While predisposition may be wrongly interpreted, by confounding it with the initial stage of the disease itself, or with its exciting cause, heredity cannot be denied in toto; for phthisis is inherited as a predisposition, or inherent quality of soil favorable to the development of tuberculosis, but which must be fertilized by the specific spores of that disease (Weber).—Powell, l. c. 195.

The influence of the sexual relations extends beyond the mother's confinement (negroes, dogs, etc.) Look at the similarity of the child to its father or mother—physiognomy. color of eyes, of irides; even the same abnormalities transmitted to the offspring are relatively on the same parts of the body as in the parent, e. g.: supernumerary fingers and toes, webbed fingers, wens, warts, moles, cleft palate, harelip, etc. So with diseases; tuberculosis, syphilis, gout, lepra, diabetes, the hemærrhagic diathesis, etc., are very frequently inherited; epilepsy, hypochondria, cretinism, hysteria, etc., can sometimes be traced through many generations in some families. Mental diseases in various forms are almost constantly transmitted, and even in the Ten Commandments, man is threatened by the Almighty with the transmission of diseases to the third and fourth generations. The most noted stamp of perversion in any family, was in the descendants of Margaret Jukes-depraved in every way. Dr. Dugdale traced the history of this family through six generations; there were 709 persons, the large majority of

which were thieves, murderers, idiots, and prostitutes. I have, myself, traced cancer of the stomach through four generations in one family.

Children who escape miliary tuberculosis of the lungs or basillar meningitis, usually remain healthy until adolescence with its disturbing influences, sexual excesses, etc., produces a powerful explosion of the latency of the disease, and rapid decline and death from phthisis follow. In some cases, of course, both parents may be tainted, and the offspring may escape tuberculosis altogether.

Tuberculosis is propagated, first, by hereditary predisposition; second, by the use of milk and flesh from tuberculous animals for food; third, by various occupations, exposure, conditions of the soil, ventilations, etc.; fourth, by direct infection from patient to attendant, whether the latter be wife, husband, child, or nurse. At the Hospital for Consumptives, at Meran, the nurses, although selected with the greatest care from the healthiest families of Switzerland and the Tyrol, quickly succumb and die from phthisis, being infected from the inhalation of finely divided sputa-particles held suspended in the atmosphere.—(Pircher).

It is now essentially necessary for us to traverse very briefly the histories of scrofulosis, tuberculosis and experimental tuberculosis, to obtain a glance of the close relations between the first two. Baillie defined scrofula as a "most common, morbid affection of the absorbent glands, in which the glands are frequently a good deal enlarged, and sometimes feel a little softer to the touch than in the healthy state. When cut into they sometimes exhibit . . . natural appearances, but most commonly some of them contain a white, soft, cheesy matter, mixed with a thick pus." Virchow taught that the primary strumous lesion was a simple hyperplasia of gland tissue; while Schueppel maintained (1871) that a scrofulous gland was a tuberculous gland.

Anciently, "scrofa" was an intumescence of the lymphatics (Hippocrates, Celsus); in the sixteenth century tubercles in the lungs were included in this view (Sylvius, Wharton); under certain conditions these tubercles enlarged and suppurated, leading to consumption. In the eighteenth

century (Kortum, Cullen, Stoll, Ackermann, Hufeland, etc.), scrofula not only embraced lymphatic gland diseases, but included also diseased processes in the skin, mucosa, bones, etc., representing a peculiar habitus which identified scrofula with tubercular disease. In the nineteenth century, Bayle, Laennec, Rokitansky endeavored to separate the two diseases, but upon the discovery of the "tubercle" the pendulum swung further and made the two diseases one. However, objections were raised, and Lebert claimed a definite entity for scrofula. The experiments of Dittrich, Buhl, Villemin, Klebs, Waldenburg, Cohnheim, Fraenkel, etc., determined the close etiological relations of the two diseases tuberculosis being engendered through the reception of caseated or regressive metamorphosis of the inflammatory products of scrofula. Subsequent researches by Schueppel, Wagner, Friedländer, Rindfleisch, Koester, etc., make scrofula the causal factor of tuberculosis-Rindfleisch asserting that "passing inflammation in a scrofulous constitution produces a toxic principle which, absorbed into the fluids. causes tuberculosis." Fitz stands practically on the same ground—(Pepper's System Med). Rindfleisch even claims that scrofulous inflammation is a tuberculosis, because it leads to secondary lymph-gland tuberculosis. Hueter avers that the scrofulous poison causes dilatation of the nutrient canals in childhood, which relatively forces larger quantities of nutrient pabulum through them, and further dilates them. These canals extend to the tegument and mucosa and through the subjacent layers, weakening these tissues, which lose their ordinary density necessary to protect them against the introduction of those organisms capable of producing inflammation; which are suspended in the air. The intruding monads produce primarily dermal and mucosal scrofula, wandering onward in the lymph channels, producing inflamed lymph-glands, which break down, cascate, suppurate, or, possibly, encapsulate the scrofula detritus. It is an undeniable fact that scrofula furnishes a well-prepared and rich soil for tubercular infection; and scrofulosis furnishes the largest contingent for tuberculosis destruction.

The tubercle of phthisis was so commonly found that

they were looked upon as the pathology of consumption. Morton spoke of it in 1689, and Baillie described tubercle in 1795. Bayle, in 1803, objected to the ancient meaning of tubercle, and subsequently "tubercles" were morbid structures. Laennec (1819) reunited what Bayle had separated, and described six forms of tubercles, which are, partly at least, the underlying basis of the pathology of tuberculosis at the present time. Broussais guessed and Carswell proved (1838) that crude tubercle was of frequent occurrence within the pulmonary air-sac-cavities; after careful investigation Thomas Addison called this condition scrofulous pneumonia (1845), which view was confirmed by William Addison in 1849. And Lebert, by aid of the microscope, found bodies in the cheesy matter which he named tubercle corpuscles. In 1850, Virchow called it a heteroplastic tissuetransparent, just the opposite of the French school teaching. In 1855, Rokitansky described giant-cells as being sometimes found in tubercle, which Langhans emphasized in 1868, and gave these cells characteristics of their own. 1863, Virchow described lymphoid, epitheloid and myeloid cells among the elements of tubercle. In 1871 E. Wagner described tuberculous lymph-adenoma, finding a giant-cell in each tubercle; the same year, Schueppel maintained that the giant cell was an essential element of tubercle, while Friedländer asserted (1874) that the reticulum of tubercle was a result of the hardening process.

The term "tubercular diathesis" was coined by Bayle in 1803, defining it as a disposition to the generation of tubercles and relating to tuberculous persons or organs. In 1856, Buhl held that miliary tuberculosis was an infectious disease, resulting from absorption of a specific poison probably residing in the cheesy matter and detritus. In 1869, Koester found innumerable tubercles imbedded in the granulations of scrofulous joints, springing from synovial membrane, bone, the walls of abscesses, sinuses, etc., and claims to have observed them in chancrous and cancerous ulcers. Friedländer alleges to have found tubercles in the stroma of recurrent cancer, and classified lupus with tubercle. No age of life is exempt; they have been found in the feetus, in

infancy, adolescence, old age, being the most common in early life. Laennec observed that three or more crops may develop in the same subject—judging their age by their form of degeneration.

A new impetus in the investigations of tuberculosis was given by Villemin in 1865. He inoculated rabbits with fresh (both transparant and opaque) tubercle; killed a month later. the rabbits showed an abundant crop of tubercles in many of the viscera. But in 1867, Andrew Clark and Waldenburg claimed similar results from the inoculation with non-tuberculous matter, and in 1868 Burdon-Sanderson and Fox proclaimed that non-tuberculous inoculation was followed by sub-dermal (local) cheesy encapsulations; while inoculation with the hot matter from a diseased gland of a living animal was always followed by tubercles. Cohnheim believed that the infectious germs were held in suspension by the caseous pus—Buhl's theory of 1856. In 1867, Feltz injected cheesy detritus into the right side of the heart and thus produced embolic nodules in the lungs which broke down by cheesy degeneration. In 1868, Chauveau caused intestinal tuberculosis in calves by feeding them tuberculous matter; and Tappeiner produced pulmonary tuberculosis in dogs by compelling them to breathe air which held in suspension finely divided particles of sputa from tuberculous pulmonary cavities. Cohnheim, Salonvonsohn caused tuberculosis of the iris by inoculating the anterior chamber of the eye with tubercular matter. Schueller produced tuberculosis of the lungs, liver, etc., in rabbits inoculated with finely divided matter from a scrofulous gland; and inoculation with lupus tissues is said to have led to similar results. It was also shown that "the pearly distemper" in cattle was equivalent to tuberculosis in man-(Villemin, Gerlack Aufreckt). Toussaint and Schiller claimed that the cause of tuberculosis was a micrococcus, while Klebs, Aufreckt, Baumgarten held that the virus was a bacillus.

Following these investigations step by step naturally led to the discovery of the bacillus tuberculosis by Robert Koch, the bacillus being found in all ejecta thrown from tuberculous cavities. But whether the bacillus alone, as such, can

produce tuberculosis in a perfectly healthy constitution is yet a moot point; whether it is a scavenger only; whether the virus resides in itself or is caused by some chemical changes in its environment; whether the chemical body be it ptomaine, leucomaine or cadaverin, crystallizable or not, is requisite to the infective process, is not yet known.

In all probability it is first necessary to have the proper soil on predisposed hereditary ground upon which one, several or all of the different incentives are required for fructification and production of a crop of slowly progressive agony, annoyance and pain, ending in death. And while this phase of the investigation may have elucidated a theory, or evolved a cause, of and for this fell disease, it has signally failed to improve our methods of treatment, having added nothing to the therapeutics of phthisis—not a single reliable remedy.

Conclusions.—1. Hereditary predisposition is the foundation, the soil, for infection with tuberculosis.

2. Congenital tuberculosis is next to impossible.

3. Scrofula and tuberculosis are practically twin brothers.

4. A scrofulous constitution is a hot-bed ready for infection with tuberculosis.

5. Apparently tuberculosis is somewhat contagious—under many conditions the attendants falling ill sooner or later when in long and close contact with the sick—and always from lung phthisis.

6. Whether the bacillus tuberculosis per se, or a chemical product evolved by its presence, is the direct cause of con-

sumption is not known.

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Clinical Reports.

Gun-Shot Fracture of the Hip-Joint. By E. H. LEWIS, M. D., Culpeper, Va.

I hope young members of the profession like myself may be warned by my failures and profited by what little success I may have had in this case.

On the evening of August 19th, 1888, I was called to Mr. N., white, about 40 years old, who had been accidentally shot while out hunting. Mr. N. is a farm-laborer and blacksmith, living about seven or eight miles from this

place.

I found him lying upon a rough litter, made of a piece of bagging, on four sticks, just as he had been brought home—about two miles from the place of accident. His wound had bled rather profusely, but had partially ceased before my arrival. This stoppage was due mainly to the coagulation of blood, caused by the soiled and worn condition of

his clothing.

The conditions of poverty and lack of cleanliness which surrounded him detained me for some time before I could put him in a position to examine his wound. Imagine the difficulty by which I was surrounded—in a one and a half story log cabin, about 14 by 16 feet, badly lighted by two small windows and a door! This cabin was inhabited by a man, his wife and six children. Such a condition of poverty, want and dirt seldom meets the eye.

To take the best advantage of his unfavorable condition, I placed Mr. N. upon as firm a surface as I could obtain—on an old-fashioned corded bedstead with a very uncomfortable straw mattress—the wounded limb being upper-

most, so as to get the best light possible.

Upon removing the clothing I found that a load of ordinary large turkey-shot, which had been fired at a distance of five feet, had entered the hip just over the acetabulum, and a little to the rear, forming a circle of four inches in diameter, the centre of which was the upper edge of the neck of the femur. Upon close examination I found that the head, neck and upper end of the femur had been entirely shattered, together with a fracture of the os innominatum and the femur at its upper third.

Having been taught by the celebrated Dr. John M. Brinton, of Jefferson Medical College, that cleanliness in such

cases gives the best promise of success, I proceeded first to cleanse the surrounding parts; then, by the aid of a very dim lamp, I removed, with my forceps and scissors, all the fragments of clothing, bone, tissue, shot, etc., with which the wound was literally packed. To assist me in this operation I dissected off the integuments and underlying fascia of a

circle, about three inches in diameter.

Finding I could no longer proceed in the way above mentioned, I threw into the wound a continuous stream of water, by means of the Omega syringe, and thus cleared it of much of its foreign matter which could not be reached by means of scissors and forceps. This was followed by a solution of bichloride of mercury (1:1000) until it was cleansed. The wound was then covered with a piece of absorbent cotton, saturated in the above solution; that covered with a piece of cotton cloth; and the whole bandaged with a two-and-a-half inch boiled bandage, extending from the knee to above the crest of the ilium. I prescribed—

M. Sig.—Apply locally three or four times per day.

I changed the dressing on the evening of August 20th, again washing the wound with the bichloride of mercury, and dressing it as before described, except that he was turned flat on his back; more extension was made; and the patient was brought to the edge of the bed, so as to obtain more perfect drainage. This time I was accompanied by Dr. R. S. Lewis, my father, in addition to Mr. H. T. Chelf, who had very efficiently assisted me the day before. No change was made, except the constant use of the above application until 22d, when the wound was thoroughly washed and re-dressed.

Suppuration having now set in more fully than before, I conceived the idea of again resorting to the syringe, as before described. The quantity of discharge had been so free that the damaged tissue came away in large fragments. The wound was dressed, as above described, every other day, until September 2nd. The cavity enlarged from time to time, until on that day it was three inches in diameter and two-and-one-half inches deep—entirely exposing the femur at the greater trochanter and the neck just above. This latter portion was shown to be a mass of shattered carious bone. Upon more closely examining the lower fracture (the one at the upper third) the lower fragment was

found to have slipped past the upper one and to be press-

ing it outwards.

The patient was now taken from the bed he had occupied and placed upon an entirely new bunk, of our own construction, with a good, solid bottom, covered by a comfortable mattress. The fractured limb was placed in a hinged fracture box, extending, on the inner side, up to the perineum; on the outer side, as near the wound as possible; and on the under side, below and above the glutei muscles to the crest of the ilium. Extension was made by strapping the foot to the end of the box by means of a cross bandage and two slots in the foot piece. The wound was then dressed, as before described, except that a piece of oakum was placed over the cotton and the bandaging was not so heavy. Splint remained on for six weeks, the wound being dressed every other day. Pure carbolic acid was now added to the hot water injection, in the proportion of about a teaspoonful to one-half gallon of water. This was thrown into the wound with the syringe, as before. During this time the wound began to show signs of granulation, as perfect drainage and cleanliness were insured by means of a gum cloth placed under the patient. The discharge amounted to from one quart to three pints a day; consequently the patient had to be fed upon the most nourishing diet we could obtain principally milk, soup, light bread, and a limited amount of stimulant.

Pain had sometimes to be quieted by the use of morphine; but this could not be used often, on account of his nervous excitement, he having a peculiar idiosyncrasy. At the end of six weeks the fracture-box was replaced by a starch bandage, made of alternate layers of boiled bandage and stout paper, pasted together. The layers of bandage ran transversely around the limb; those of paper longitudinally, with an occasional one running transversely. This bandage extended from the foot to the perineum. Bed-sores began to give us considerable trouble, and were relieved only by constant attention in ever-varying ways. Nothing seemed to relieve them very long.

At the end of four weeks I removed the starch bandage, and found the lower fracture entirely united, with a reduction in the wound itself to about the size of the index finger, and not more than one-and-one-half inches in depth. Still some discharge continued; so many fragments of bone were

thrown out, it could not be entirely stopped.

On the 21st of November, I found the patient much im-

proved; but with an anchylosis of the joint, which will not prevent its being of some use, as there is just shortening enough of the limb to keep it out of the way in walking on crutches, but not enough to prevent his standing on it when standing still. On the evening of December 10th I placed the patient on crutches, and think in the course of a few weeks he will be able to go out of doors, provided the weather will admit.

In this case I credit what little success I may have had to the constant use of the bichloride of mercury and other antiseptics thrown into the wound by the solution syringe. I believe farther, if this agent could be constantly applied to the interior of such a wound, by means of a nozzled tube, with an elevated reservoir containing not less than one-half to one gallon, and continued for two hours, at intervals of from one to four days, the discharged liquid being allowed to flow away by means of sufficient drainage tube, we would have much better success; but in cases like this, where there is as much dirt, poverty and want as has been above described, this appliance would be out of the question.

Eclampsia Occurring in the Seventh Month of Pregnancy—Recovery. By R. L. PAGE, M. D., Batesville, Va.

I was called to see Mrs. M., age about 20, white, by occupation a ruler in a cotton factory. I found her suffering from very violent convulsions of an epileptiform character. Her attendants stated that she had had several attacks before my arrival, and she was taken with another soon after I entered the room.

Her whole body and extremities were intensely swollen, and, as far as I could learn at the time, she was between six and seven months advanced in her first pregnancy. Her husband stated that she had passed but little water for several days previous, and, upon introducing a catheter, I drew off an ounce or two of highly-colored urine, which was highly albuminous. Her pulse was full and slow, but the artery was so tense, that it gave the impression of a tendon.

The convulsions, each of which lasted about a minute,

were coming on about every quarter of an hour, and she did not regain consciousness between the attacks. I gave a prescription of grs. xx of jalap and gr. v of calomel, and administered a large dose of chloral and bromide of potassium. This did not relieve the convulsions, in the least, nor did the purgatives take any effect. On examination, I found that labor had not begun, the os being high up and rigid. The convulsions were increasing, and the coma becoming deeper, so I opened the median-basilic vein, and took about twelve ounces of blood. This softened the pulse, and the convulsions did not return for several hours. The calomel and jalap still not having acted, I gave her one-fifth grain of eleterium, and ordered another to be given in an hour, if her bowels did not move.

At 9 P. M. her husband came for me, with the report that the spasms had returned with even greater violence than before. I returned, in company with Dr. William Nelson, who had kindly offered to assist me, and found the report quite true. Her pulse was now quite feeble, and the other symptoms indicated that she could not live long in her

present condition.

We found the internal os slightly patulous, and the cervix more dilatable; so we concluded to attempt delivery. By taking turns, we soon succeeded in dilating wide the fingers sufficient to grasp a foot and bring it down. From now on delivery was accomplished with but little trouble. The time consumed in the operation was just one hour, and a few hours later we left the patient in a very good condition, she having reacted from the chloroform, and was free from convulsions.

However, she had several mild spasms during the night, but they had entirely ceased by morning. The purgatives now took effect; also, her kidneys began to act. From this time on there was no further trouble, and she made a complete recovery in a few days. She regained consciousness two days after the convulsions had been controlled.

Though this is the only case I have ever seen occurring so early in pregnancy, still I am inclined to believe that artificial delivery affords the surest means of arresting the convulsions, as it gives the patient the best chance for life. I am sure my patient would have died under the expectant treatment, for the usual remedies had no effect until delivery was accomplished.

Guropęan Correspondencę,

Heating of Cabs, Chauffereths Dangerous—Fool Hardiness of Cochers—Doctors Mostly Hire their Teams—Tetanos, Its Contagiousness, etc.—Mercury Succinimide Hypodermatically for Syphilis—Methods of Treating Erysipelas—Pasteur's Establishment or Institute—November Work in it Sustains Pasteur's Views—The Doctrine Proved—Charcot Approves It.

Paris, January 12th, 1889.

To the Editor of the Virginia Medical Monthly:

Dear Sir,—Much excitement prevails in Paris at the present moment in regard to the heating of cabs. Although the season has been a very mild one, two deaths and several severe accidents have been reported as resulting from the inhalation of carbonic oxide gas, generated by the chauffereths with which the public vehicles are supplied when protection against cold becomes a necessity. Professor Gautier having had his attention attracted to this matter by the fact that one of his colleagues came very near being thus fatally poisoned, has addressed a communication to the Prefect of Police, in which he calls special attention to this new danger, and urges the prompt prohibition of the use of charcoal as a heat producer in all the voitures of Paris.

Frenchmen have a mortal horror of exposing themselves to les currents d'air, and make it a rule to raise the windows of a carriage so soon as they enter it—"thus developing," as Professor Gautier explains, "the conditions most favorable for intoxication with carbonic oxide gas, and that consequent disorganization of the red globules of the blood, from which such serious results ensue to the human system."

In view of the facts upon which this report is based, and of the able manner in which it discusses them, the public naturally expected that prompt and efficient measures would be adopted for suppressing the evil to which it relates; but, with the usual luck of human expectants, they have been doomed to disappointment. The Prefect has found himself either so hampered by red tape or so paralyzed by the political power of the cab corporations that he has done nothing

beyond warning *voyageurs* of the perils which await them in the "voitures chauffées," and of intimating to their proprietors the possibility of a prosecution for "involuntary homicide" in the event of another fatal accident.

There was a time in France when a nuisance like this would have been abated at once by an imperial decree; but nous avons changé tout cela, and have inaugurated an era of "Liberty, Equality and Fraternity," in which mercenary corporations enjoy that absolute license which those words are interpreted to signify, and to secure, in all regards, under the ægis of this so-called Republic. It is not surprising, therefore, that many have already grown weary with the established order of things in this country, and desire, and predict, an early and radical change in them. In shallah! is all that my position as a stranger and a sojourner will permit me to say on the subject.

The drunkenness, incapacity and mauvaise volonté for which the cochers of Paris have rendered themselves notorious under the existing political régime, make cab travelling sufficiently dangerous per se, and the addition of this new peril from chauffereths—this probability of having one's red globules robbed of their vitalizing oxygen and surcharged instead with the deadly gas emanating from burning charcoal—with nothing to modify or extenuate the situation save the prospect of a retaliatory proces for "involuntary homicides" in the future, is rather too much for the sang froid even of the most callous boulevardier. Accident insurance companies would seem to be the supreme desiderata of the hour in this metropolis.

This reference to insurance companies reminds me to explain the meaning of the term mauvaise volonte employed in a previous paragraph. Cochers are compelled by their employers to pay to the insurance companies a daily stipend of three sous, who, in return, agree to assume the responsibility for all damages which may be sustained or occasioned by them. When they have paid this assessment for a time without the occurrence of an accident, they feel that they have been imposed upon—that they have received no quid pro quo for their money—and they deliberately cause a col-

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- When desired, books will be set aside a reasonable time for further consultation.



lision, in order to get even with their masters, the companies, and the world in general. With true communist instinct, they invariably select a private carriage as the object of their attack, and, without regard to the possible sacrifice of life and property involved, they seek to do it all the injury possible, knowing that the police are their friends and will protect them, and that the insurance officers will have to fight the matter out in the courts, and to pay the bill if the decision is against them.

For this reason especially, although there are others which reinforce it, the medical men of Paris generally make it a point not to own the horses and carriages which they employ in their professional work, but to hire them either by the month or the year from some public stable. In this way, also, they always have fresh horses and good vehicles at their command, while they are saved the expense incident to repairs and accidents of all kinds. Indeed, from what I can understand, this "jobbing system," as it is designated, has extended far beyond medical circles. It is said that a large majority of the equipages which daily frequent the fashionable drives in the Bois de Boulogne, notwithstanding the gorgeous crests emblazoned upon their panels, and the glittering trappings with which their high-stepping teams are caparisoned, are not the property of the aristocratic fossils who sport them, but of the Compagnie-General des Voitures, or of some other similar corporation. By thus disporting themselves in borrowed plumage, these impecunious representatives of the old regime are able, at a very cheap rate, to keep up the appearance of wealth, and to save themselves from the contretemps alike of a seizure for debt upon the public highway, a compulsory sale at the Sale des Vents, and a sensational paragraph in the Figaro; while they escape the vengeance of that enfant terrible, the exasperated and unscrupulous cocher.

The subject of *tetanos* is still being discussed to the exclusion of nearly everything else. It rages equally in the Academy of Medicine, the Societies of the Arrondissements, and the medical journals, and each day brings forth a new

idea, or theory, respecting its etiology and mode of propagation, though, I regret to record, nothing new is advanced relative to its proper treatment. Verneuil, the impressible, aggressive, erratic, but still able and eloquent, Professor of Surgery, has made a report to the Academy in which he takes the following grounds: 1st, That tetanos is of equine origin; 2nd, That it has a characteristic microbe, through the agency of which it is reproducible; and 3rd, That it is essentially a contagious disease. These extreme views have not passed unchallenged. Dr. Guerin and others have controverted them with great vigor, declaring that it frequently manifests itself where horses do not exist—as for instance, on ship-board, and in the higher latitudes; that, admitting the existence of a characteristic microbe, there is no reason to believe that the malady is propagated by its instrumentality, since inoculations with the blood of infected animals—a fluid in which the bacilli of Nicolaire especially abound-have proved invariably infructuous; and that the assumption of its contagiousness is an inference rather than a deduction. Referring to the pretended reproduction of tetanos in a rabbit at the Jardin des Plants—a circumstance upon which Verneuil principally based his argument in this regard—Guerin pointed out that the only fact at all justifying such a conclusion, was the manifestation of fatal convulsions—a phenomenon which usually precedes the death of an inferior animal, whatever may be the nature of the disease to which it succumbs.

Dr. Le Blanc, in a very interesting article recently communicated to the Journal de Medicine de Paris, states that he has frequently inoculated animals—including horses, which are peculiarly susceptible to the malady in question—with blood surcharged with the characteristic microbes of tetanos, without producing it; while he has induced it by employing pus taken from the wounds of tetannic animals. He concludes, consequently, that the characteristic microbes themselves are impotent in the propagation of tetanos, and that it is only when ptomaimes have been developed, and are introduced into the systems of healthy animals that inoculation proves a success.

M. Nocard, of the Veterinary School at Alford, likewise reports a series of experiments, in which inoculation with infected blood gave negative results, while inoculation with pus reproduced the disease, which he regards as a veritable septicæmia when thus developed.

M Rictich, of Marseilles, on the other hand, warmly advocates the theory of the equine origin of tetanos. According to him, he has repeatedly taken the debris of the floors of stables in which the disease had previously existed, subjected it to a process of maceration, and then inoculated guinea-pigs with it—with the result of producing distinctly marked cases of tetanos. He, however, was unsuccessful in reproducing the disease, after using both the blood and pus of infected animals. So that while he sustains one of Verneuil's theories, he contradicts the others, and thus leaves the question where he found it—in a labyrinth of confusion and uncertainty.

It will thus be perceived that the experiments which have been made with the view of reproducing tetanos artificially are unreliable, contradictory and of little value; while the fact remains that the disease frequently is developed spontaneously—apart from equine influences or contagion or infection or any other comprehensible cause. Notwithstanding all the learning and labor which have of late been devoted to the subject of tetanos, nothing has been discovered respecting it beyond the existence of the bacilli of Nicolaire; and its true etiology and mode of propagation are still as much matters of conjecture as when it confronted us in the lang syne upon battle fields of the Confederacy.

Dr. Vollert, of Strasbourg, recommends the subcutaneous injection of the succinimide of mercury in the treatment of syphilis, upon the grounds that it is comparatively unirritating to the tissues, and more prompt and efficient in its effects than any other preparation of that metal. He employs a solution of the strength of $1\frac{30}{100}$ per cent, and injects it daily, taking care to carry the needle parallel with the skin, and into the subcutaneous cellular tissue; to inject slowly; and to rub gently the boule as it forms in consequence of the entrance of the fluid. He tried it in 210 cases, and only produced an

abscess in two of them, while the average duration of the treatment lasts thirty days.

There are two methods of treating erysipelas much in vogue here—one suggested by Dr. Hallopean, of Paris, and the other by Dr. Nussbaum, of Munich. In the former, a calomel purge is given in the outset, and sulphate of quinine and salicylate of soda, on alternate days, are administered afterwards; while over the affected part, is spread a thick compress of lint, saturated with a solution of the salicylate of soda of the strength of 1 in 20, and covered with oiled silk to prevent evaporation. It is claimed that immediate relief is experienced, and that the disease is cured in from three to five days.

In the latter method general remedies are left to the choice of the physician, while the crysipelatous surface is, first, anointed freely with a mélange of equal parts of lanoline and icthyol, and then wrapped in salicylated cotton. It is said that a notable amelioration of the symptoms occurs in twenty-four hours, even when the face and head are involved.

After much experience in the treatment of erysipelas, I have arrived at the following conclusions in regard to it: 1st, That local means alone are powerless to arrest or cure the disease; 2nd, That the most potent general remedies are, first, a saline purge, and afterwards muriated tincture of iron in combination, or in conjunction with sulphate of quinine; 3rd, That one local remedy is about as good as another, provided it be antiseptic, and care is taken to protect the affected parts against atmospheric air as rigorously as if it were the seat of a burn.

Pasteur is now fully installed in the establishment which his friends have erected as a tribute to his genius and an evidence of their confidence in his mode of treatment. Some of his enemies—and like all great and good men he has them in abundance—immediately styled it La Palace de la Roge, meaning to imply that it fosters and disseminates the very scourge which he proposes to combat; but statistics recently published incontestably demonstrates the reliability of his system of prevention, and furnish a rebuke to their

malignity which should silence and cover them with shame and confusion.

From the Bulletin Medical of January 6, 1889, it appears that "during the month of November, 1888, one hundred and seven persons were treated in the Pasteur Institute. Of these, fourteen were bitten by animals positively proved to have been mad; sixty-eight by animals alleged to have been mad by veterinary surgeons; and twenty-five by animals suspected to have been mad; while not a case of hydrophobia was developed and not a death occurred."

As figures cannot lie, and one fact counterbalances an infinitude of theories, these statistics, taken as they are from a record which is openly and publicly kept, and respecting the reliability of which there can be no controversy, only tend to confirm and perpetuate the confidence which I have always entertained in this system and in its illustrious pro-

mulgator.

Since my residence in France, circumstances have brought me into intimate relations with the renowned Charcot, and I have found him to be a man, not only of commanding genius and profound learning, but of great common sense, cool judgment and honesty of purpose. The fact, therefore, that he, upon purely scientific grounds, and not under the influence of personal considerations of any kind, has always been a warm and unflinching advocate of the doctrines inculcated by Pasteur, has had much to do with the favorable opinion which I formed of them from the first, and which I shall continue to hold until something more potent than conjecture, ridicule and defamation are arrayed against them.

American physicians seem to plume themselves upon their antagonism to the teachings of Pasteur, and to repudiate toto cœlo the efficacy of his method of protecting the human system against the development of hydrophobia. This is due, I think, in a great measure to the sensational articles which were published on the subject in the outset by certain newspapers in New York, with a view, not of benefiting the public, but of securing notoriety and money for themselves, and, which, naturally, disgusted the profession and caused it to look with distrust upon a discovery thus associated with trickery and charlatanism.

As offsets to the shameful prostitution to which the doctrines promulgated by this distinguished savant were thus subjected for mercenary considerations, it should be remembered that, as a scientist and a humanitarian, their author stands prominent; that a committee appointed by the English government, and composed of physicians of known ability and reliability, after a most careful investigation, reported in their favor; that in every civilized country—save perhaps our own—they have been accepted as scientific truths, and institutions have been established under governmental patronage for their practical application; that every government of Europe has awarded to their author its highest honors, as a recognition of his services to science and humanity in this connection, and has voluntarily contributed money for the erection of an establishment in which they can be given their most thorough application and their highest development; and that statistics, respecting the reliability of which discussion is impossible, have incontestably established that, through their agency, the number of cases of hydrophobia has notably diminished, and the ratio of its mortality perceptibly decreased. We cannot afford to stand, doubting or cavelling or sneering, in solitary grandeur upon one side of a line which has upon the other the combined intelligence, learning and enthusiasm of the world; and, beside, it is our special mission to occupy a place in the very vanguard of advancing science, and to stand primus inter pares in all that relates to the interests of humanity.

I intended to refer to several other matters, but have already written so long a letter that I feel constrained to postpone them to another occasion.

I am very truly yours, etc., EDWARD WARREN-BEY, M. D., C. M., LL.D.

15 Rue Caumartin.

Gorrespondence.

Mr. Editor,—Dr. C. R. Cullen, one of the leading physicians of this county, recently sold out at "Fruitland," his residence, and moved to Waldo, Fla. Dr. Cullen graduated from the Academic Department of the University of Rhode Island in 1846, and took his medical degree at the Medical College of Virginia in 1848. He practiced his profession here for the last twenty-five years. He had a very large and remunerative practice, and leaves behind him a host of friends who remember his sympathy, kindness and skill at the bed-side. The Doctor is "well up in medicine," and keeps abreast of his profession in all of its advances in the field of clear, scientific thought. He was a member of the first Medical Examining Board of Virginia (1884), and the Medical Society of Virginia, at its last meeting in Norfolk (October, 1888), re-elected and the Governor of Virginia reappointed him to this most important position. He is generous to a fault, and has paid security-debts for scores of his friends (?) here, besides losing some fifteen hundred dollars by the colored people, who, just after the war, appealed to his well-known and well-tried generosity to "stand for them" in buying horses with which to cultivate their little farms. His removal to Florida is a loss to this entire community. and no one feels it more keenly than the writer.

The citizens of Waldo receive into their midst not only a cultivated Christian gentleman of the old Virginia type, but an educated physician of large experience and fully up to

all the most important advances of medical science.

J. W. WILLIAMS, M. D.

Old Church, Hanover Co., Va., Jan. 10, '89.

Priginal Translations.

From the French. By R. M. SLAUGHTER, M. D., Theological Seminary, Va.

The Therapeutic Uses of Strophanthine.

Drs. G. Sée and Gley, in a communication to the Academy of Medicine (*La Tribune Med.*, Nov. 18, 1888), give the following description of strophanthine and its uses: Strophanthine is a glucoside occurring in colorless crystals, easily

soluble in water and alcohol, insoluble in ether, and has an acid reaction. The preparation used was that of Wurtz, and was given in doses of $\frac{1}{64}$ to $\frac{1}{35}$ of a grain (1 on à 8 cinquiemes de milligramme). It was used in all cardiac dis-

eases with very little variation in result.

1st. The most favorable results were obtained in mitral lesions, particularly in contraction of the mitral orifice; less favorable in aortic insufficiency. This was shown by greatly increased cardiac action, as proved by the sphygmograph. From the beginning, the pulse, which was at first depressed, small and feeble, gained strength. The irregularities of the pulse disappeared. These changes were observed even when the heart had lost its force, and there was no longer any compensation remaining, and when even pulmonary and venous stasis existed with peripheral ædema. In none of the cases, however, was there any relief of dyspnæa, or diuresis and consequent diminution of ædema.

2d. In dilatations and fibroid hypertrophies, depending upon general arterio-sclerosis, the same results obtained.

3d. In the painful affections of the heart and angina pectoris, strophanthine aggravates the trouble and increases suffering.

4th. There was noticed no disturbing action upon the

stomach or brain, but in some cases vertigo occurred.

Comparison of strophanthine, sparteine and digitalis: Strophanthine is not superior to sparteine, and is far more toxic. Sparteine, moreover, does not increase the blood pressure so much. Digitalis has an action manifestly inferior to that of strophanthine upon the functional activity of the heart; but strophanthine produces its cardiac effect, and, at the same time, a powerful and general contraction of the blood vessels, and, is consequently, inferior to digitalis.

Dr. Dujardin-Beaumetz remarked that strophanthine should not be prescribed, because there are in the market no less than five kinds, not counting strophanthidine. For strophanthus, like digitalis, or a preparation of the plant, and not its active principle, should be prescribed. Strophan-

thus is an excellent remedy.

To Prevent the Deposit of Fat in the Mammæ.

Professor Kisch recommends for this purpose that the mammary glands be first covered with an iodoform ointment, of which this is the formula:

 The breasts are then to be enveloped in warm cloths, which have been dipped in the following:

 R. Alum
 1 part.

 Acetate of lead
 15 parts.

 Distilled water
 100 parts—M.

Over the cloths place some oiled paper, and leave all in place for twelve hours. This is to be repeated morning and evening, and should be continued for several weeks. The breasts should be rubbed at the same time with an aromatic alcohol to harden the skin, and prevent its having a dried-up look. A bandage, which will hold the breasts well up, should be worn.—Rev. de Therap.—Le Praticien, December 10, 1888.

Treatment of Diphtheria.

Dr. Lichtermann, of Berezowka, in the Government of Cherson, a country in which epidemic diphtheria constantly exists (*Med. Oboz.*, No. 24, 1887), has employed in over 300 cases of diphtheria, with great success, the following treatment:

When called to a case, he selects the largest room in the house, and disinfects it with chlorine gas. After an hour's ventilation, the patient is placed therein. The treatment begins with a hot foot-bath, of fifteen minutes' duration; after this, the patient is wrapped in woolen blankets and allowed to perspire for two or three hours. The bath is repeated every evening.

Local treatment: First, paint the interior of the throat four times daily with a solution of sodium salicylate in glycerine (30 grs. to f5j). Second, gargle every half hour with an aqueous solution of potassium chlorate (6 parts to

180).

Internal treatment: Two mixtures—one white, the other red: The first is composed of potassium chlorate, 45 grs.; water, 6 ounces; and simple syrup, 1 ounce. The second, of chlorohydric acid, 45 minims; water, 6 ounces; and raspberry syrup, 1 ounce. The patient takes every hour a tablespoonful of the white, and follows it immediately with the same dose of the red mixture. Children under 2 years take only a teaspoonful. Sprays of a solution (3 to 100) of carbolic acid are thrown about the patient. The patients spit in a vessel containing a five per cent. solution of carbolic acid. At the end of twenty-four hours, the temperature becomes normal, and after forty-eight hours there is entire disappearance of the false membrane.

The writer's mortality up to April, 1885, when he began

this method of treatment, was 45 per cent. From April, 1886, to October, 1887, he treated, by the above method, 237 cases of diphtheria, 68 of which were of the gangrenous variety, with only four deaths, or a mortality of 1.7 per cent. He gives the following theory of his treatment:

1st. Under the influence of respiration, the blood of the patient loses water and becomes thicker and richer in salts, which, according to Dr. Wachsmuth, gives a medium

less favorable for the development of the microbes.

2d. The administration of potassium chlorate aids con-

siderably this concentration of the blood.

3d. Under the influence of the simultaneous administration of chlorohydric acid and potassium chlorate, there is developed an acid of chlorine, which, in the nascent state, acts energetically as an oxidizer and microbicide.—(Bull. de Therap.—Le Praticien, Nov. 12, 1888).

Proper Names in Medical Nomenclature.

The use of proper names in medical nomenclature is un-

fortunately of not uncommon occurrence, and is often perplexing to the reader. We, therefore, translate from Le Progres Medical, of October 6, 1888, the following list: Addison's keloid-morphæa; Addison's disease-bronzed skin; Alibert's disease-mycosis fungoid; Aran-Duchenne's disease—progressive muscular atrophy; Astley-Cooper's hernia—crural hernia with multilobar sac; Argyll-Robertson's sign—absence of pupil reflex; Basedow's disease—exophthalmic goitre; Bazin's disease—buccal psoriasis; Beclard's hernia—hernia opposite saphenous orifice; Bell's palsy—paralysis of the seventh pair; Bergeron's disease rhythmic localized chorea; Bondin's law-antagonism of paludism and tuberculosis; Boyer's cyst—sub-hvoid cyst; Brights disease—albuminous nephritis; Brown-Sequard's syndrome—hemi-paraplegia with hemi-anæsthesia of opposite side; Cazenave's lupus—lupus erythematosus; Charcot's disease—ataxic arthropathy; Charcot's disease—lateral amyotrophic sclerosis; Cheyne-Stokes' respiration—uræmic respiration; Cloquet's hernia—pectineal hernia; Colles' fracture-fracture of the lower end of the radius; Colles' law—non-infection of the mother by her syphilitic child; Corrigan's disease—aortic insufficiency; Corvisart's facies asystolic facies: Cruveilhier's disease—simple gastric ulcer; Donder's glaucoma—simple atrophic glaucoma; Dressler's disease—paroxysmal hemoglobinuria; Dubini's disease electric chorea; Duchenne's disease—locomotor ataxy; Duchenne's paralysis—pseudo-hypertrophic palsy; Duhring's

disease—dermatitis herpetiformis; Dupuytren's disease contraction of the palmar aponeurosis; Dupuytren's hydrocele—encysted hernia; E. Wilson's disease—generalized exfoliative dermatitis; Eichstedt's disease—pityriasis versicolor; Erb's paralysis—paralysis of the roots of the brachial plexus; Erb-Charcot's disease—spasmodic tabes dorsalis; Fothergill's disease—tic douloureaux; Fowchard's disease alveolar-dental periostitis; Friedreich's disease—hereditary locomotor ataxy; Gerlier's disease—paralysant vertigo; Gibert's pityriasis—rosy pityriasis; Gibbon's hydrocele hydrocele with voluminous hernia; Gilles de la Foureth's disease—motor incoordination with echolabia and coprolabia: Govrand's hernia—inguino-interstitial hernia; Grave's disease—exophthalmic goitre; Græfe's sign—dissociation of the movements of the globe of the eye and the upper eye-lid; Guyon's sign—renal ballottement; Harley's disease—paroxysmal hemoglobinuria; Heberden's rheumatism—rheumatism of smaller joints with nodosities; Hebra's disease—polymorphous erythema; Hebra's pityriasis—chronic pityriasis rubra; Hebra's prurigo—true idiopathic prurigo; Henoch's purpura—purpura with intestinal symptoms; Hesselbach's hernia—crural hernia with multilobar sac; Hippocratic facies—agonized facies; Hodgkin's disease—adenitis; Hodgson's disease—aortic atheroma; Huguier's disease—uterine fibro-myoma; Hutchinson's teeth—syphilitic teeth; Hutchinson's triad—syphilitic teeth, interstitial keratitis and otitis; Jacob's ulcer-chancroidal ulcer; Jacksonian epilepsy-partial epilepsy; Kaposi's disease-xeroderma pigmentosum; Kopp's asthma-mymic asthma, spasm of the glottis; Kronlein's hernia-inguinal, properitoneal; Lænnu cirrhosis—atrophic cirrhosis; Landry's disease—acute ascending paralysis; Laugier's hernia hernia across Gimbernat's ligament; Leber's disease—hereditary optic atrophy; Levret's law-marginal insertion of the cord with placenta prævia; Littre's hernia-diverticular hernia; Ludwig's angina—subhyoid infectious phlegmon; Malassez's disease—cystic disease of the testicle; Ménière's disease—labyrinthic vertigo; Millar's asthma—stridulous larvngitis; Morand's foot—foot with eight toes; Morvan's disease—analgesic paresis of the extremities: Paget's disease—pre-cancerous eczema of the breast; Paget's disease hypertrophic deforming osteitis; Parrot's disease—syphilitic pseudo-paralysis; Parrot's sign—dilatation of the pupil on pinching the skin (meningitis); Parkinson's disease paralysis agitans; Parry's disease—exophthalmic goitre:

Pavy's disease—intermittent albuminuria; Petit's (J. L.) hernia—lumbar hernia; Pott's aneurism—anastomotic aneurism; Pott's fracture—fracture of fibula by divulsion: Pott's disease—vertebral osteitis: Raynaud's disease—symmetrical asphyxia of the extremities; Reclus' disease—cvstic disease of the breast; Richter's hernia-parietal enterocele; Rivolta's disease—actinomycosis; Romberg's sign unsteadiness of ataxics in darkness; Rosenbach's signabolition of abdominal reflex; Salaam (tic de)—convulsive salutation; Semisch's ulcer—infectious corneal ulcer; Stork's blenorrhea—blenorrhea of the upper air passages: Stokes' law—paralysis of muscles subjacent to inflamed serous cr mucous membranes; Sydenham's chorea—common chorea: Thomsen's disease—muscular spasm at the beginning of voluntary movements; Tornwald's disease—inflammation of Luschka's pharyngeal gland; Velpeau's hernia—crural hernia in front of the vessels; Volkmann's deformity—:ongenital tibio tarsal luxation; Wardrop's disease—malignant onyx; Weil's disease—abortive typhus with jaundice: Well's facies—ovarian facies: Werlhoff's disease—purpura hemorrhagica; Westphal's sign—abolition of patellar reflex; Willan's lupus—lupus, tubercular in form: Winckel's disease—pernicious evanosis of the newborn.

While this does not include all the proper names to be found in medical literature, it does contain those most commonly seen.

From the German. By M. D. HOGE, Jr., M. D., Richmond, Va.

An Old Styptic Revived.

As early as the fifteenth century the bursa pastoris was used very generally as a styptic, and, after a long period of forgetfulness, has been revived by Ehrenwall (Rundschau, 1888, 10), and used with good result. From the bursa pastoris a fluid extract has been prepared, as well as acid bursinicum. Three to four teaspoonfuls of the extract is given daily; in larger doses it causes distress in breathing, headache and vomiting.

Rapid Recovery from Echinococcus of the Liver.

As a method, which seems to be freer from danger than the usual injections of iodine, alcohol, etc., Bacelli (*La Reforma Medica*, 1887, 98), of Rome, has reported his manner of treatment as follows: A woman, age 26, was admitted

into the hospital, who had suffered from a slow-growing tumor of the liver, of irregular outline, smooth surface, fluctuation, no pain, no fever, nor disturbance of the digestive functions. A sterilized needle was introduced, and about a teaspoonful of-clear, transparent fluid was obtained, and which, under the microscope, showed the characteristic parasites. Into this cavity about one-half drachm of a one to one thousand solution of corrosive sublimate was injected, and the wound quickly closed. Half an hour after the operation vomiting began, and continued for several hours. A slight fever was observed for five days. The woman made a good and rapid recovery, and left the hospital in a month cured.—(Rundschau, 1888, 10).

Emphysema of the Mediastinum.

An emphysema of the mediastinum takes place in the following manner: With a severe fit of coughing the wall of an alveola of the lung is broken, the air is forced into the interstitial tissue, and follows the bronchial tubes and blood vessels, the hilus, and thence into the mediastinum. The extension downwards can only reach as far as the diaphragm, while upwards it may extend under the greater part of the skin. Mueller (Schmidt's Jahrbc., 215 Bd.) gives the following clinical symptoms: 1st. Sub-crepitant rales, synchronous with the heart's action, which may completely obscure the heart sounds; the crackling sound is not affected in any manner by the change of position of the patient, and may be heard at all times. 2d. A complete obscuration of cardiac dullness, and, in its place, a sonorous loud tympanitic sound. 3d. Disappearance by sight and feeling of the apex beat. The prognosis depends mainly upon the cause of the original disease — (Rundschau, 1888, 11). Creosote in Phthisis.

So much has been written recently about creosote in consumption that Guttmann (Zeitschi f. Klin. Med., 13 Bd.) has undertaken some experiments as to its antiseptic effect.

It was shown that four kinds of micrococci were killed by a 1:4000 of creosote, eight in 1:2000, and five in 1:1000. Others withstood even this concentration. The growth of the tuberculous bacillus in a 1:4000 solution was very slow and much retarded. In order that the blood should contain creosote enough to bring it to this concentration, there must be, at all times, at least fifteen minims in the circulation—more than is therapeutically allowed. In spite of this fact, Guttmann thinks that, with the usual dosage, the creosote retards the growth of the bacillus, and many cases of

phthisis have been very much benefitted by this treatment.—Rundschau, 1888, 11).

Whooping-Cough.

Lately several microscopic workers have shown that whooping-cough is a mycosis of the mucous membrane of the respiratory tract, and the germs grow on the membrane and are not taken up by the blood vessels. Spontaneous recovery takes place when, in the latter stages of the disease, there is a large amount generated, which, with violent coughing, is thrown off and out, so carrying the germs with it. The treatment must be in a line with what has just been said, namely, the greatest possible quantity of mucus must

be generated and thrown off as soon as possible.

During a recent whooping-cough epidemic, Widowitz (Wr. Med., Wochenschr, 1888, 17,) prescribed syrup squills in one hundred and forty-nine cases, with good results, in 88 per cent. Every afternoon, between 5 and 6 o'clock, the children were given from a coffeespoonful to a dessert-spoonful every ten minutes. On the first and second days of this treatment there was always violent vomiting, especially if the patients had recently eaten; but this soon gave way to a most marked improvement in the number of the paroxisms. Syrup of squills had great influence over the number and violence of the attacks, but none over the duration of the disease.—(Rundschau, 1888, 11).

Heat in Erysipelas.

As a novel application of an old principle, Dr. Hilsmann, of Constantinople (Rundschau, 1888, 11), relates the following, with the request that its utility should, if possible, be tried: A butcher applied for treatment, to have a large abscess in the axilla opened. This was done, and the wound dressed antiseptically. But, in spite of this, erysipelas attacked the arm, side and breast, accompanied by a high fever. He disappeared for a while, but on the third day returned for further treatment, saying an old woman had cured him of erysipelas. The patient, on questioning, stated that she had covered the inflamed parts with pieces of an old horse blanket, smeared the outside with wax containing oakum, and the mass then ignited. On removing the blanket, the erysipelas had disappeared.

The next case the author treated in the following manner: A piece of felt was laid over the inflamed parts, and a hot iron quickly passed over this a few times with the best re-

sults.

Lymphangoitis and scorpion-bites were proceeded with in the same manner, and cured after two applications.

Milk Diet in Heart Disease.

The brilliant results achieved by Karell, of St. Petersburg, induced Hogerstedt (Wiener Med. Bl., 1888, 15,) to give the absolute milk diet a fair trial. The almost immediate improvement was in striking contrast to that of the usual means of calomel, digitalis, acetate of potash, etc. The patient who had for nine years suffered from stenosis ostii atrio-ventriculi sinuti, was brought, in a seeming dying: condition, into the hospital. She was very much reduced in flesh, pallid countenance, cedema of the lower extremities, quick respiration (forty-four per minute), and enlargement of the spleen. After fourteen days of the usual diuretic treatment, in which there was further weakness from diarrhea, night sweats, harrassing cough and decubitus, without any benefit, the milk diet was begun. was at first given a tablespoonful every two hours, which amount was in a few days increased to half a cupful every half hour. Improvement began at once, the quantity of urine increased, albumen disappeared, and the ædema became much less. Every attempt to strengthen the patient with cocoa and bread and meat, was soon followed by a relapse; the same was found to be the case when resort was had to diuretics. After two months of such strict treatment the patient was fatter and stronger; all symptoms of disturbed compensation ceased, and, on auscultation, all the heart tones could be heard loud and distinct. Great stress is laid upon beginning with a small quantity and slowly increasing, to allow of perfect digestion, rest in bed, and plenty of warmth.

This seemingly direct contradiction of Oertel and Bamberger, who recommend mountain climbing and withholding of all fluids, does not apply, as in this case it is the weak muscular heart which needs attention, and has no reference to valvular disease or disturbance of compensa-

tion.

Chloride of Zinc in Malignant Tumors.

It frequently happens that, either on account of the size or topographical position, we are not in a position to remove tumors by the knife. Hence Strinthall (Rundschau, 1888, 11,) has recommended the old canquoin paste (equal parts of chloride of zinc and amylum) for such cases. In order to apply this paste to cavities, as rectum or vagina, it is not consistent enough; this can be easily remedied by the addition of oxide of zinc and less water than is usually employed. The escharotic action is very energetic, and often produces local swelling and some fever for a few days;

but the pain is not very great, and can be easily controlled by small doses of morphine. In order to protect the surrounding parts from the action of the paste, they should be well protected by vaseline tampons.

Proceedings of Societies, Boards, etc.

FLORIDA MEDICAL ASSOCIATION.

The regular annual session of the Florida Medical Association, according to adjournment last year, was to have been held this year in April, in Key West. But as an extra session of the Legislature had been called by the Governor of the State to convene early in February, to make some better provision than now exists to protect Florida from future invasions of such a terrible epidemic of yellow fever, etc., as has just swept over important parts of it, this session of the Florida Medical Association was called, on the united requests of the County Boards of Health of Marion, Putnam, St. Johns and Duval counties, for the express purpose of discussing a bill establishing a State Board of Health which it is intended shall be offered to the Legislature next week for enactment.

St. Augustine, Fla., Tuesday, January 29, 1889.

In response to the call, the Florida Medical Association convened at noon in the Young Men's Christian Association Hall, and was called to order by Dr. DeWitt W. Webb, of St. Augustine, Chairman of the Committee of Arrangements. The chair was occupied by the President, Dr. R. A. Lancaster, of Gainesville. The Secretary, Dr. A. W. Knight, of Jacksonville, was at his desk. Prayer was offered by Rev. W. L.

Githers, of Trinity Episcopal Church.

The Address of Welcome was delivered by the Mayor of the city, Hon. W. W. Dewhurst. Among other things that he well said were: "Yours is a noble profession. How worthy you, gentlemen of the Florida State Medical Association, are to belong to so grand a profession the history of the last summer is a witness. The story of your heroism and devotion is told throughout the land. No words of mine would add to the record you have made. The people of St. Augustine consider your meeting to-day of great importance to the welfare of the State. * * We promise you, gen-

tlemen, that if you in your wisdom shall devise some practical measures which shall secure us immunity from epidemics, such as last summer visited our State, we will build to you in our hearts monuments of grateful remembrance."

Dr. John D. Fernandez, of Jacksonville, the surgeon in charge of St. Luke's Hospital during the late epidemic, said in response: "I think the President very wise in appointing St. Augustine the place of conference to institute a State Board of Health for self-protection. I can point with pride to St. Augustine as being one of the few seaboard cities that has kept the dreaded yellow fever from within its borders. St. Augustine illustrates that the pestilence can be kept away."

The Committee on Credentials, Dr. Neal Mitchell, chairman, retired to prepare their report, while the Secretary called the roll. About fifty members, all told, were in at-

tendance during the session.

Dr. C. Drew, Jr., offered suitable memorial resolutions relative to Dr. William L. Baldwin, who "was removed from the scene of his earthly labors during the late epidemic while engaged in the faithful and unselfish discharge of his duty," which resolutions were unanimously adopted.

Dr. Jerome Cochrane, State Health Officer of Alabama; Dr. Smith, of Kentucky; Dr. H. C. Carruthers and Dr. Middleton, were welcomed to take part in the proceedings of the

convention.

On motion of Dr. Thomas P. Gary, this meeting was made the regular annual convention in lieu of the meeting called for Key West in May.

It was understood that the special call for this meeting was made for the counties of Duval, Marion, St Johns and Putnam, at which a bill establishing a State Board of Health

would be presented and discussed.

President Lancaster then delivered his Address. He said that since 1875, the second year of its existence, the Florida Medical Association has been untiring in its efforts to procure the establishment of a State Board of Health. Realizing fully the importance of a thoroughly equipped State organization for keeping from our shores, if possible, or if it should effect an entrance, of successfully combating such foes as yellow fever, cholera, small-pox, etc.; recognizing the great importance of disseminating and enforcing rules for sanitation; and appreciating the advantages which would accrue from a reliable collation of vital statistics, this Association has long tried to prevail upon legislators to provide

for this great need. Year after year you have appointed a "Committee on State Board of Health," who have in every way labored faithfully to bring about this much-needed legislation. But the law-makers have failed to profit by your advice and warning until spoken to by the voice of pestilence. That voice has been heard, and so loud, so deep and so far-reaching has been the sound that every son and daughter of this fair State—aye, of this broad land—have heard, and cry aloud for protection.

Situated upon a peninsula extending almost into the tropics, with a great extent of seacoast and numerous harbors, and with a climate which, while the most delightful in the world, possesses for so great a portion of the year that degree of heat and moisture which scientists recognize as essential to the growth and dissemination of the yellow fever organisms; and, too, situated so near to and in almost daily communication with the West India Islands—the habitat of yellow fever—it has long been apparent that some well-organized and well-equipped system for guarding the public health was essential to the welfare of the State. Without proper sanitary and quarantine regulations, the very climate, which is now one of the chief attractions of our State, may become our bane.

Our Governor has called an extra session of the Legislature to consider the establishment of a State Board of Health. While you do not make the laws which govern in these matters, you can do much to shape them; I believe that you can shape them. If proof were needed that the existing laws, vesting authority in county boards of health, are not sufficient, I have only to remind you that, during our recent epidemic, in at least one instance, the fever was carried from an infected to a non-infected county through the unfaithfulness or ignorance of the former's Board of Health. We must see to it that there are placed in authority men of skill and experience—men who can rise above local interests and act for the good of the whole State.

I have heard a few advocate leaving the whole matter in the hands of the United States Government, which at present means the Marine Hospital Service. Those of us who are most familiar with the history of the last epidemic would not advocate such a plan. The General Government did much for Florida, but how much more she might have accomplished if her aid could have been extended through an efficient State Board of Health, composed of men who could have remained at the point of danger, and, being upon the ground, could have acted promptly upon important matters without the vexations and dangerous delays spent in telegraphing our senators in Washington to look up the Sur-

geon-General, and other delays of a similar nature.

Probably the most difficult and the most important question with which we, as a State, must grapple, is the subject of quarantine. If we have been taught anything by the recent epidemic, it is that efficient quarantine will protect from The exemption of St. Augustine, Palatka, yellow fever. Ocala, and other places, with the same favorable surroundings for its spread as existed in Jacksonville, Gainesville and Enterprise, is an unanswerable argument in its favor. With proper quarantine restrictions, rigidly enforced against Cuban and other infected ports, we have but little to fear. There are always individuals and committees ready to cry down any measure which promises to interfere with their commercial interests. There are a few places in this State whose business prosperity is so dependent upon their West Indian and South, or Central American traffic, that they would prefer an occasional visitation of vellow fever to having restrictions placed upon their shipping interests. But, for the interest of a few seacoast towns and of transportation companies, can this great State of Florida afford to incur. even occasionally, such losses of valuable lives, or property, and of confidence in her future, as we have experienced in the last year?

It may be that very heroic measures are not necessary; that restrictions similar, for instance, to those practiced by the Louisiana State Board of Health, may be all that is necessary; but such strict quarantine as will insure us protection, whether it be for six months or for twelve months of the year, whether it be restriction or total suppression of traffic with infected ports, will, in my opinion, do more to restore confidence and to bring renewed prosperity and happiness to our beloved State, than all else that can be

done.

Our sister States of the South have a right to demand that we take steps necessary to our protection, for our State cannot suffer alone. We should request our general Government to patrol our sea-coast in order to suppress all smuggling and to see that there is no evasion of such quarantine restrictions as our State authorities may declare.

I would suggest the desirability of procuring and having printed in our published proceedings, a correct history of the epidemic, in order, among other reasons, to refute authoritatively the incorrect statements on the subject emanating from Washington.

Your Committee on the State Board of Health, will present for your consideration and approval a draft of a bill

creating a State Board of Health.

He closed with a glowing tribute to the noble heroism of those of the local profession who remained at home to minister to the wants of the needy, and of those who came from a distance to render aid and comfort in the days of trial, danger, and want.

Adjourned until 8 P. M.

AFTERNOON SESSION-FIRST DAY.

On motion of Dr. R. P. Daniel, the President's Address

was referred to the Committee on Publication.

The committee on the proposed bill to establish the State Board of Health (Drs. R. P. Daniel, C. J. Burton, and F. H. Caldwell), reported the draft of the bill they had formulated. Each section was taken up in discussion, and the bill, as prepared for presentation to the Legislature next

week, is reported in the proceedings of to-morrow.

Upon request, Dr. Jerome Cochran, of Decatur, Ala., gave his views on the proposed legislation. "In Alabama the Governor makes no appointments. The county authorities make no appointments. But all is left in the hands of the Medical Association. This has ten executive officers. The State Health Officer is named by this Association. They have a fund of their own. All executive powers of the State Board of Health reside in the State Health Officer. We have a medical society in each county, which is a committee of the Board of Health, and appoints the county health officer. Everything done for the protection of health, is done by the medical associations of the counties through the various executive health officers. If your bill needs any amendment, it should invest the County Health Officer with executive powers. It is fortunate that your bill does not make quarantine the chief question. Dr. Porter's idea is that a Board, organized as he suggested, would be efficient in that it could be convened promptly. I hardly know what to say. I am not familiar with the laws of your State on quarantine."

Dr. A. S. Baldwin said: "Florida will never accept the

shot-gun."

"The powers of our Health Officer," continued Dr.

Cochran, "and of the State Board of Health of Alabama are well defined. We have almost absolute authority to do anything for the preservation of the public health. I do

not think Alabama's system would suit Florida."

On motion, the chair appointed Drs. P. H. Strauss, R. B. Burroughs, and C. Drew, Jr., a committee to draft a suitable memorial of Dr. Eddy, of Louisville, Ky., who died in Jacksonville, yielding his own life while administering to others.

NIGHT SESSION—FIRST DAY.

From 8 P. M. till 9:30 P. M., the time was consumed in discussing and adopting the several sections of the proposed bill.

Adjourned until to-morrow morning.

SECOND DAY-MORNING-WEDNESDAY, JANUARY 30TH.

Called to order at 9:30 A. M.

The Committee on Credentials, Dr. Neal Mitchell, chairman, reported favorably on the following names for membership: W. R. G. Veal, of Cotton Plant; W. S. Newsom Summerfield, D. A. Dwelly, J. L. Hersey Fernandina, and Harriet E. Preston, of St. Augustine. These physicians were elected members of the Association by acclamation. (Dr. Preston is the first female applicant for membership that has ever presented herself for admission in this Association.)

The committee appointed for the purpose, presented a series of memorial resolutions, regarding Dr. E. L. Eddy,

which were adopted.

Discussion of the proposed bill was then continued, and, after various amendments, alterations, etc., of the original, the following was adopted as a whole:

THE PROPOSED BILL.

Section 1. Be it enacted by the Legislature of Florida: That there is hereby established a State Board of Health, to consist of five members, to be appointed as hereinafter

provided.

Section 2. The Governor shall, immediately upon the passage of this act, select and appoint, by and with the advice and consent of the Senate, five persons who shall be citizens of Florida, and three of whom, at least, shall be respected members of the medical profession, to constitute said Board. The terms of office of the members of said

Board shall be four years, unless sooner removed by the Governor for cause; provided, that the terms of two of the members so first appointed, shall expire in two years from the dates of such appointments. The regular meeting of said Board shall be semi-annually, and at the seat of government, and a majority of its members shall constitute a quorum for the transaction of business. But the Board may be convened at any time and place, whenever, in the opinion of the President of the Board, the public welfare may require it, or at the request of three members of the Board.

Section 3. On a day appointed by the Governor, within thirty days from the date of their appointment, the members of the Board of Health shall meet, take oath of office, and proceed to organize. They shall elect one of their members as President of the Board; he will perform all the duties usually appertaining to such position, and his term of office shall be two years. If, at any time, the President is prevented from performing the duties of his office by reason of necessary absence or disability, the senior medical member of the remaining portion of the Board shall, tempo-

rarily, fulfill the functions of President.

Section 4. As soon after its organization as consists with the proper performance of such duty, the Board shall elect a State Health Officer, who shall hold his office for four years, unless sooner removed by the appointing power for sufficient reason. This officer shall likewise fulfill the functions of Secretary of the Board; and no member of the Board shall be eligible to the position of State Health Officer. The person selected shall be a physician, the graduate of a medical college in good standing; he shall be learned in State medicine and sanitary science, and shall have had such experience as will fit him to hold said office. He shall be the executive officer of the Board, and shall, under its direction, or in any emergency, under that of the President of said Board, faithfully and to the best of his ability, skilfully carry out and execute all the regulations and rules of the Board of Health.

Section 5. The pay of the members of the Board of Health shall be \$4 per day during the time that the members are absent from their usual business in attendance upon the regular or special meetings of the Board. They shall also be allowed the usual mileage of other State officers, when having to travel in the performance of these official duties. The State Health Officer shall receive a salary of \$3,000 per

annum, payable quarterly, and he shall likewise be allowed his reasonable traveling expenses, when such are incurred in the performance of his official duties; and all bills for payment of salaries or other expenses or expenditures, incident to the operations of said Board of Health, shall be audited as in the case of other State officers, and paid out of any sum appropriated by the Legislature for such purpose.

Section 6. An appropriation of such amount as may seem necessary, shall be made by the Legislature from time to time, to meet the regular expenses of the Board of Health, and likewise to provide a contingent fund, which shall only be available on occasions of special need and emergency. Requisitions for all such sums shall be made, duly attested by the President of the Board of Health, upon the proper disbursing officer. The Board shall select and adopt a seal.

Section 7. The said Board of Health shall be, and is hereby, empowered to make and put into effect all such rules and regulations as it may deem expedient for the protection and preservation of the public health, and all county and municipal health authorities shall be subordinate to the State Board of Health. The Board shall proceed at once to frame such rules and regulations as may be deemed advisable for its own government, and likewise for the prevention of the introduction or spread of epidemic diseases, and for the registration of vital statistics. Such rules and regulations, after being approved by the Governor, shall be duly promulgated; and any wilfull violation of said rules and regulations shall, upon conviction thereof before any court of competent jurisdiction in the State of Florida, be punished by a fine not exceeding \$500, or confinement in a county jail not exceeding ninety days.

Section 8. The Board of Health shall make a report of its

proceedings to the Governor annually.

Section 9. All acts and parts of acts in conflict with this

act, are hereby repealed.

Dr. Drew moved that the committee appointed to draft the bill be continued, as a legislative committee is in order to press the bill through the Legislature. Carried.

Dr. Daniel stated that the committee could accept such an onerous commission only with the earnest and heart-felt

co-operation of each member of the Association.

Dr. Dean moved that the co-operation of the county Boards of Health be secured, in aid of the passage of the bill. Carried.

The President stated that the Reports of Standing Committees were in order. Dr. Dean moved that the Standing Committees be excused from reporting at this meeting, but be continued and report at the next meeting of the Association.

Dr. Drew amended the above by inserting a clause to the purport, that all who desire should be excused. The amend-

ment was adopted.

Dr. Thomas Gary, chairman of the Committee on Medicine, asked to be excused.

Dr. Caldwell, from the Committee on Surgery, asked the same.

Dr. Phillips, chairman of the Committee on Gynecology, was not present.

Dr. J. Y. Porter, of the Committee on Hygiene and Sanita-

tion, was excused.

The Committee on Diseases of Children, Dr. H. W. DuBois, chairman, was also excused.

The Committee on Publication's report was received, and

the committee discharged.

The Treasurer's (Dr. J. D. Fernandez) report, showed dues to the amount of \$558.35 had been collected. Balance on hand, less expenses, \$483.75.

The resignation of Dr. T. M. Palmer, of Monticello, as an active member, was accepted, and his name was placed on the honorary roll of membership, upon a motion to that effect, which was carried unanimously.

The Committee on Arrangements reported an invitation, on behalf of the St. John's County Board of Health, to lunch at the Ponce de Leon Hotel at 1 o'clock. Accepted.

Reports of local Medical Societies were then in order.

Dr. Daniel presented a report on the condition of the Duval Society, relating to the sad losses sustained and the difficulties which the Society had to contend with. The Society had now re-organized, and at the next meeting he hoped a brighter report might be made.

The chairman of the Marion Society asked that the Association give its attention to the passage of a law, which would facilitate physicians in the collection of bills, not from persons who could not pay, but those who would not pay

for medical services.

Dr. Drew did't think any new law would facilitate in any

way the collection of doctor's bills.

The hour of 12, noon, having arrived, the convention ceased its deliberations in order to hear the oration of Dr. F. F. Smith, of St. Augustine. It was listened to with much interest.

At 1 o'clock the St. John's County Board of Health called for the physicians, and escorted them to the Ponce de Leon, where they had lunch.

AFTERNOON SESSION—SECOND DAY.

The President called the meeting to order, and stated that the business in order was the reading of papers on yellow

fever. etc.

Dr. Thomas Gary read a paper on "Malarial Hematuria." The discussion, with reference to administering quinine in the above disease, was quite warm. Drs. Burroughs, Caldwell, Webb and others, related experiences in the administering of quinine.

Dr. Caldwell thought the giving of small doses of quinine

would produce beneficial results.

Dr. Gary said that he had persevered in the use of it in the case of one patient for eight days; this treatment resulting in the funeral of the patient.

A vote of thanks was tendered Dr. Gary, and his paper

was referred to the Publication Committee.

Dr. Merrell spoke on the epidemic of yellow fever at

Green Cove Springs.

A paper by Dr. J. F. McKinstry, on the Yellow Fever Epidemic at Gainesville, was read by Dr. F. F. Smith. A

vote of thanks was tendered Dr. McKinstry.

Dr. Caldwell had had no time to prepare a record of the Enterprise affair, but he had charts showing the temperature and pulse of the patients in St. Luke's Hospital in Jackson-ville, at Mellonville, and at Enterprise. He would complete the records and turn them over to the Publication Committee. On motion, Dr. Caldwell's offer to present these

charts to the Association, was accepted with thanks.

Dr. C. Drew, Jr., of Jacksonville, read an interesting paper, and presented a chart of a typical case of the famous "Society Fever," as it appeared in Jacksonville last spring. Drs. Daniel and Drew had a number of charts of this society fever, which would be turned over to Dr. Caldwell, who would delineate the analogy between that and the yellow fever. Dr. Drew advanced the idea that if the Gulf traffic was a source of danger, it should be abolished. He spoke of the necessity for a State board of health, and urged that the State adopt an efficient system of quarantine regulations, and touched upon many other important subjects relative to the introduction of epidemic diseases into Florida cities.

Dr. Drew's paper was received with applause, and was referred to the Publication Committee.

Drs. Merrell's and McKinstry's papers were referred to

the Publication Committee.

Dr. Porter spoke on the paper of Dr. Drew and said that he had listened to it with great interest. The main question is, "Can communication be kept up with Cuba with safety?" It is not, "Can the Plant Company continue intercourse?" but "Can any company continue it?" "I answer, after mature thought, that it can. Tampa depends upon Cuba for her tobacco supply. My own idea is that it is better to encourage legitimate intercourse, using all means to reduce the danger to a minimum. When yellow fever formerly appeared in Charleston, Savannah and New Orleans, those cities did not cease growing. Besides this, the death rate of yellow fever is less than that of diphtheria and typhoid fever. It is the duty of the medical profession to uphold any legitimate commercial enterprise. When Key West had yellow fever two years ago the fever was not introduced into any town by the highways of legitimate travel. Key West or Tampa will never consent to be cut off commercially from Cuba. The Plant Steamship Line is governed by rules of maritime sanitation. I challenge the production of any testimony that proves that yellow fever was introduced into Florida by the legitimate channels of travel. The fever of 1887 at Key West crept in when that city was off its guard. Key West now has a surveillance of passenger traffic from Cuba all the year round. The clothing of passengers is required to be clean before leaving Cuba. A personal inspection is made in Cuba of every passenger and every piece of baggage, with correct descriptions. These are made before leaving Cuba. At Tampa and Key West another similar inspection is made. Vessels made of iron are very easy to keep clean. Germicides are used for this purpose. I think we should be careful before putting ourselves on record in an important question like this."

Dr. Stringer stated that he had passed through every State epidemic since 1853, and had had opportunities of observing its introduction. "You cannot," he said, "obliterate intercourse with Cuba. If you encourage importation through a legitimate line, with proper instructions, the danger will thus be reduced to a minimum." He thought that the Legislature should pass certain quarantine restrictions to be carried out thoroughly and efficiently in the most

strict meaning of those words.

Dr. Porter said that the first cases at Tampa had occurred among the fruit dealers selling tropical fruits, which had been introduced by smuggling. It would take a whole navy to suppress this. Therefore it is better to encourage

legitimate travel than to attempt non-intercourse.

Dr. Caldwell spoke of a visit to Cuba and of the efficiency of the inspection of Dr. Burgess at Havana. American lumberships were frequently tied up in the slips at Havana into which the sewers from the barracks and hospitals emptied. Fishing and trading smacks, carrying on illicit travel with Florida, anchored here and were the cause of nine out of ten cases of introduction of yellow fever into Florida. He vouched for the absolute cleanliness of the steamers of the Plant System throughout, and illustrated the sanitary regulations of these ships very thoroughly. He said that but one case of fever had appeared in these ships, and that one had been simply bilious fever. The steamers go into the harbor of Havana after sunrise and depart before sunset.

The question was then discussed ad libitum.

Mr. Daniel spoke of a physician friend, who had been allowed to come from Cuba with but a superficial inspection of his baggage.

Adjourned to 8 P. M.

NIGHT SESSION.—SECOND DAY.

After the convention was called to order at 8 o'clock, Dr. Dubois was elected a delegate to the National Pharmacutical Convention, to be held in Washington in April next.

A vote of thanks was extended to the St. Johns County Board of Health for the elegant banquet at the Ponce de Leon.

The Secretary was instructed to communicate with the County Boards of Health, to secure the assistance of the representatives on the passage of the bill in the Legislature.

Dr. Lancaster gave up the chair to the vice-President in order to take the floor to nominate Dr. C. Drew, Jr., of Jack-

sonville, for President.

Dr. Daniel nominated Dr. Lancaster, of Gainesville, for President.

Dr. Drew seconded Dr. Daniel's nomination.

Dr. Lancaster hoped this nomination would be withdrawn.

Dr. Gary was then nominated. Dr. Gary very gratefully declined, but his nomination had been seconded.

The ballot resulted: Gary, 6; Lancaster, 15; Drew 3. Dr.

Lancaster, therefore, was duly elected President.

Nominations for vice-President were then received. Dr. Drew received a majority of votes, and was duly declared first vice-President.

Dr. DeWitt Webb was elected second vice-President on

the second ballot.

The next place of meeting was then discussed. The bal-

lotting resulted Key West, 15; Ocala, 8; Tampa, 1.

The time decided upon is the second Tuesday in April, 1890, at which time it was decided that the Association should take a trip to Havana.

The following resolution was then adopted:

Resolved, That this Association has confidence in the official assurances which have been given by the Boards of Health and by the representative of the Marine Hospital Department, that the State is free from yellow fever at this time, and the members so announce themselves.

The orator appointed for the next convention is Dr. M.

W. Ellis. The session then adjourned sine die.

Analyses, Selections, etq.

(I.) Five Ounces of Arsenic Taken by a Suicide, after Attempting Suicide by Shooting. (II.) Fracture of Cervical Vertebra by Fall into a Depression with Soft Dirt Bottom.

Dr. H. N. Moyer, of Chicago, Ill., reports the following cases (Atlanta Med. and Surg. Jour., Feb., 1889) as of medico-

legal interest:

Case I.—Man about 50, fairly well developed, and remarkably free from decomposition, considering the summer temperature and that death had taken place several days before. Physicians had certified that the immediate cause of death was poisoning. But, on examination of the body, a perforating gun-shot wound of the chest was found at the left border of the sternum in the third intercostal space. The bullet had penetrated the inner border of the left lung and lodged in the pericardial wall, and was partially encysted with lymph. Apparently, the injury caused little disturbance—no inflammation, hæmorrhage or pus, although the process of repair was progressing rapidly. No sign of decomposition was observable about the abdomen or

elsewhere. Intestines were of dark mahogany color, presenting a strong contrast to the yellow fat of the omentum. The stomach was lined with a green substance which proved to be Paris-green. A two-ounce vial was nearly filled with this salt after washing the stomach and intestines. This amount of arsenic precluded the idea of homicide. It seems from other evidences that he shot at his son-in-law, and thought he had killed him. He then immediately shot himself, but the attempt to kill himself failing, he fled; and some days later, supposing himself a murderer, he took the

Paris-green (about five ounces) with fatal effect.

Case II.—Man found lying in a depression of loose dirt, some three feet deep, in an unconscious condition, and died four hours later. Rigor mortis well marked, and there were no external marks of violence. On reflecting the scalp, an irregular shaped ecchymosis, about 1½ inch in diameter, was found on vertex; but the brain and internal organs were normal. But a small ecchymosis was found in the posterior wall of the pharynx. A slight inequality in the body of the fifth cervical vertebra was noticed, and when head was pressed backwards a complete transverse fracture of the vertebra was detected. It was thought that the fracture resulted from the fall into the depression.

What To Do with Urethra and Testes in Amputation and Ablation of Penis.

Dr. W. Locke Chew, of Birmingham, Ala., remarks (Atlanta Med. and Surg. Jour., Feb., 1889) that this question is one of moment in cases of sarcomatous or carcinomatous growths of the penis—diseases tending to early death. Should the corpora cavernosa and the lymphatic glands of the groin be removed in such cases? There is great liability of recurrence of the diseases named in these structures after amputation of the diseased penis. In summing up the whole matter, he comes to the following conclusions:

1st. Were the desire to perpetuate life only, we should advise, in each case of advanced sarcoma or carcinoma of the penis, immediate removal of the corpora cavernosa, down to the rami of the ischia (Gould)—simultaneous castration being laid before the young, and enucleation of the inguinal and perineal glands in every case, together with the transferal of the urethra to the perineum. (Humphrey Thiersch) But considering the fact that it is always desirable to save

the penis and testes, it is advised,

2d. That as long as such a portion of the organ may be

saved that sexual congress can be effected—procreation possible—the testes should be undisturbed, the urethra brought out of the end of the penis, slitting the urethra and stitching it to the perforated slit in the centre of the lower flap, allowing the newly-formed meatus to be involved as little as

possible in the contracting inflammation.

3d. Such are the mental phenomena liable to follow total ablation of the penis, in those of strongly marked sexual affinity, it should not be ignored; but this fear on the part of the surgeon should never make him advise simultaneous castration, for these phenomena are rare, and castration can be readily resorted to at any time; but as a means of relief in these cases is worthy of trial.

4th. In malignant diseases of the penis, the statistics of recurrence in the testes do not warrant castration or removal of the scrotum, for this alone; but invasion of either having

begun, the total removal of both should be advised.

5th. Where total ablation is called for, the urethra should be transferred to the perineum (Humphrey and Thiersch), with the testes, and the scrotum should be preserved for future operation, should symptoms or extension of the disease afterwards call for it.

Foreign Bodies in Nose-Pathognomonic Sign-Treatment.

Dr. Frank Trester Smith, of Chattanooga, Tenn., reports (Atlanta Med. and Surg. Jour., Feb., 1889) three cases: One of a piece of hickory-nut shell in the nose seven months; one of a glass button in the nose for three years, with a rhinolith beginning to form; and one of a rhinolith formed around a cherry-pit in the nose thirteen years. In each of these cases one symptom was present to which Dr. Smith thinks no one has yet called attention—a chronic (generally fætid) discharge confined to one nostril. In all other forms of rhinitis both nostrils are affected. If the one-nostril discharge is sanious, the diagnosis is the more certain. As to treatment, a 20 per cent. solution of cocaine muriate, applied to the nostril. Less than three grains should be used, as more than this quantity absorbed into the system has proved fatal. Forceps are the more eligible means of removing the body through the anterior nares. If so large or so situated as to make it impossible to remove the foreign body anteriorly, then it may be removed posteriorly. Sternutatories are applicable in some cases. Another method is to blow forcibly and suddenly into the patient's mouth. Cohen uses a curved bougie, introduced from behind. Gross.

recommends his ear-pick. Mackenzie uses the douche, although Dr. Smith mentions the douche and the syringe only to condemn them. Bryan resorts to the hook or the wire noose. Leeches may be loosened from their hold by using a wash of a solution of salt. Cocaine has the advantage over general anæsthetics in that it also constringes the blood vessels of the mucous membrane, and, by thus reducing the swelling, the nostril becomes more patent.

Constipation a Cause of Catarrh.

Dr. N. R. Gordon, of Springfield, Ill., thinks (Atlanta Med. and Surg. Jour., Feb., 1889) that perhaps 90 per cent. of cases of naso-pharyngitis are due to constipation. If the constipation is obstinate, the catarrh is also, and only yields to treatment when the former has been relieved. The forms of diet that produce constipation consist in large quantities of rich and highly seasoned food. The increase in the annual consumption of sugar is simply enormous, and has much to do with the prevalence of catarrh. The common exposures, such as draughts of air, damp feet, etc., are only exciting causes, and as such are responsible for the production of acute rhinitis; but the kind, variety and quantity of the food is responsible, in a great measure, for the functional inactivity of the digestive organs, and consequently the direct cause of naso-pharyngeal catarrh.

Amblyopia Due to Menstrual Suppression.

Dr. Charles W. Kollock, of Charleston, S. C., reports the case (N. C. Med. Jour., Jan., 1889,) of a bright mulatto schoolgirl who, a year previous, developed intense pain in head and eyes. Glasses did not improve her condition. age of I2 years (April, 1887,) she menstruated for first time, and as this function became well established, she got well of her eve-pains and headaches. Menstruation ceased in October, and the former symptoms returned, and by December she was entirely blind in her right eye, and had but little vision in the left, and this failed by February 22, 1888. She was then anæmic, dull countenance, mind sluggish, etc. Under treatment for amenorrhæa, menstruation returned. and eye sight was restored, as well as her health. The three months that the blindness lasted in this case makes it very remarkable—in that the sense of sight can be so long held in abeyance by some functional nerve trouble, and be then entirely recovered.

M. Dor, in 1884, reported a case where blindness lasted twelve days in the right and six weeks in the left, with hemianæsthesia of the left half of the body; but vision became perfect after re-establishment of menstruation. Christensen reports the case of a married woman, aged 33, who had epileptic attacks before each menstrual period and was blind several hours later. Once she became blind after an hour's headache with non-appearance of menses, and lasted a month. When she menstruated a month later, vision instantly returned, but was never perfect. Hirschberg, two cases of amaurosis hysterica with optic atrophy in girls aged 16 and 18 years who had not menstruated. Kohn reports a case of amblyopia from suppression of menstruation. Samelsohn reports a case of amaurosis, a girl aged 21, due to sudden suppression.

Book Notices.

La Mort par la Decapitation. Par Le Dr. PAUL LOVE, Préparateur du Laboratoire de Physiologie de la Sorbonne. Préparateur du Cours de Médicine Légale à la Faculté de Medicine de Paris. Préface de M. le Dr. P. BROWARDEL, Professeur de Médicine Légale et Doyen de la Faculté de Médicine de Paris. Paris: Bureaux du Progrès Médical. Octavo. Paper. 280 pages. 1888.

We have examined with no small degree of interest this work, which gives in detail the history of the subject, as well as the experiments of its author, to determine scientifically a long mooted question. We can only commend the truly scientific spirit that has actuated Dr. Loye in endeavoring to settle this question. To such an extent was he imbued with this spirit of true scientific research, that he did not shrink from being present at the execution of the condemned criminal, in addition to the performance of his many experiments on animals.

Does consciousness survive decapitation? Is there any suffering experienced after the head is separated from the body? These are questions that have been discussed for centuries, and particularly in France, during the last century. The opponents of capital punishment, and those who, while not opposed to it, object to the guillotine as the instrument of punishment, argue always the affirmative side, and bring up, as convincing points, certain movements of

muscles or groups of muscles in the heads and bodies of decapitated persons as surely indicative of consciousness and suffering. The literature of the subject is rich in stories and legends, describing remarkable and often impossible per-

formances of executed persons.

Notable among these legends, is that which tells of Mary, Queen of Scots, how the lips of her decapitated head continued in motion finishing the prayer she was repeating when the fatal stroke was given; and that of the unfortunate Charlotte Corday, over whose beautiful features, as the story goes, suffused the blush of shame when her decapitated head

was held up to the gaze of the rabble.

The conclusion arrived at by our author—the result of careful study and investigation—is, that decapitation, as a means of punishment, is the one of all others that puts an end most quickly and surely to all consciousuess. The passage of the knife through the tissues of the cervical cord has the action of an intense irritant, and this action transmitted upward and downward to the centres in brain and cord, produces by inhibition instant death. Breathing and consciousness instantly cease. Muscular contractions and contorsions do sometimes occur, but are simply unconscious, automatic movements. This is proven by the fact that an animal may be made profoundly unconscious by means of an anæsthetic just prior to decapitation, and yet these movements, which appear to indicate suffering, produce themselves just as in the unanæsthetized animal. The heart ceases to beat for a few seconds from the intense excitation of the vagus nerve, but soon resumes its contractions and continues them for, sometimes, more than an hour, for it carries in itself the mechanism of its own movements. The innervation which it receives from the brain or cord acts only in regulating its action. The heart is then truly. ultimum moriens. The arrest of heart-action cannot always be considered the termination of life, for life, so far as consciousness and feeling are concerned, may end long before the heart ceases to beat.

It would seem, from the study of this work, that as a means of producing instantaneous death, decapitation is an ideal method of capital punishment, but the repulsive mutilation of the body will surely prevent its general adoption. There is little doubt, however, that in this country we might have a better method than that by hanging. Society has not yet arrived at the condition that capital punishment may be abolished. We would probably be better off if we

had rather more than less of it. We should then be interested in the adoption of that method which inflicts least torture upon the condemned. Electricity, as the means for producing the death of condemned criminals, is to be tried in New York. It remains to be seen what the result will be.

Physician's Hand-Book for 1889. By WILLIAM ELMER, M. D., and ALBERT D. ELMER, M. D. New York: W. A. Townsend Publishing Company. 1889. (From Publishers.)

We regret not receiving this book in time to announce in January number that this thoroughly revised (nearly rewritten) hand-book for 1889 was ready. This is the thirty-second year of its publication, and the printed memoranda are so full, and so well prepared, and so handily arranged as to make it a most valuable companion book for every practitioner. It would be well for some more widely advertised visiting lists to leave off some of their printed trash and adopt more of the useful memoranda contained in this book. Besides as full a statement of poisons and antidotes as possible, all other matters of an emergency, as far as practicable, should be systematically stated in such a physician's "vade mecum" as this. And here we find the editors have selected those things chiefly which are of practical momentary importance to the physician. We very cheerfully direct favorable attention to this "Visiting List," etc.

Wood's Medical and Surgical Monographs. Vol. I. No. 1° Contents: The Pedigree of Disease. By JONATHAN D. HUTCHINSON, F. R. S. Common Diseases of the Skin. By ROBT. M. SIMON, M. D. And Varieties and Treatment of Bronchitis. By Dr. FERRAND. 8vo. Pp. 259. Heavy paper. Price \$1. (From Publishers.)

Messrs. William Wood & Co., of New York, N. Y., began the publication of these *Monographs* in January of this year as a substitute for "Wood's Medical Library." We confess that we have to commend this substitution for several reasons; but no reason overrides that of each monthly publication being for sale by itself at a dollar instead of compulsory annual subscription of \$10, which is the price of an annual subscription to these *Monographs*. These monthly *Monographs* during the year will consist of "original treatises and of complete reproductions in English of books and monographs selected from the latest literature of foreign countries, with all illustrations, etc."

Taking the present January Volume I as a "sample copy," we could only say that each volume will be worth to the purchaser much more than the price affixed. And seeing that the February No. is to treat of "Gonorrheal Infection in Women," of "Giddiness," and of the "Clinical Value of Albuminuria in Bright's Disease"—each article by a distinguished authority in England and France—we are forced to advise every one of our subscribers who can do so to economize time and money by subscribing at

once \$10 for the annual (monthly) set.

The Monograph on "Pedigree of Diseases," named in the title of Volume I, now under notice, consists of six lectures on Temperament, Idiosyncrasy and Diathesis, delivered in 1881 by Mr. Hutchinson. The eight lectures on "Common Diseases of the Skin" are marked by their special practical nature on Pruritus, Eczema, Psoriasis, Scabies, Acne and Ringworm. Dr. Ferrand's lectures in 1887 present a methodical classification of the numerous varieties of the diseases of the bronchi, and with special reference to the therapeutical indications of each form.

While the *Monographs* do not contain an index, a very full "table of contents" follows each title-page, which greatly

facilitates ready reference to a subject.

Lectures on Ectopic Pregnancy and Pelvic Hæmatocele.

By LAWSON TAIT, F. R. C. S., Edin. and Eng., LL. D., M. D. from several Ame. Med. Colleges, etc., etc. Birmingham, Eng.: The "Journal"

Printing Works, New street. 1888. Cloth. 8vo. Pp. 107. (From Author)

The author begins with the idea that ectopic gestation may be due to any process or accident which reduces the internal lining of the Fallopian tubes to the same condition as that of the uterus. Such a condition is caused by destruction of the proper ciliated epithelium of the tubes. Ectopic gestation in the free portion of the tube infallibly involves rupture at some part of its progress before the fourteenth week, and he has seen such rupture of the tube at the fourth week. When this rupture opens into the peritoneum, it causes death. But when it opens into the cavity of the broad ligament, it is known as extra-peritoneal pregnancy; and this is the only form which yields the cases that go on to the period of viability and all the lithopædidia, all the suppurating cysts discharging into the bladder, rectum, etc., and also the cases which, by secondary rupture of the

ovum cyst, get to be called "abdominal pregnancies." As a monograph, this work is an excellent one—especially as in general a favorable review of Dr. Parry's historic work which is familiar to every American medical student. This monograph may be considered an appendix to Parry's book which brings that work up to the advanced views of the day in laparotomy, etc. The pages on hæmatocele criticise Dr. Emmet's definition, etc. But our space forbids our entering into a review of Dr. Tait's very valuable contribution on the subject, beyond saying it is suggestive, instructive and practical.

Essentials of Physics and Chemistry. By CONDICT W. CUTLER, M. D., Physician-in-Chief of New York Dispensary, etc. Third Edition, Enlarged and Revised. New York and London: G. P. Putnam's Sons. 1889. Demi 8vo. Pp. 296. Price \$2. (For sale by West, Johnston & Co., Richmond.)

This book is written especially for the use of students in medicine, and is not intended to take the place of such standard text-books as Ganot and Fownes. It is intended to bring out the essentials of physics and chemistry, and thus prove of special service to the student preparing for "quiz" or examination. It is not open to a review, and can only be commended on its design, and approved because of its accuracy of statement. It is a book that is of little use to him who has not studied a fuller treatise or has not had the benefit of a full set of lectures; but it is an admirable book with which to follow a Professor while lecturing. Messrs. Putnam's Sons are especially due an approving note for the excellent taste they exhibit in "getting out" not only this, but all other books of its grade. A full index is added to help easy references to a subject. Paraldehyde, sulfonal, and some other things will perhaps be included in a subsequent edition.

Hand-Book of Historical and Geographical Phthisiology.

Compiled and Arranged by GEORGE A. EVANS, M. D., etc. New York:

D. Appleton & Co., 1888. Cloth. 12mo. Pp. 295. Price \$2. (For sale by West, Johnston & Co., Richmond.)

The author starts out with the assertion that "so far as our information goes, pulmonary consumption has always existed." And then he gives a historical sketch of some 40 pages. The chapter on geographical distribution covers 23 pages. But especially interesting and instructive are the

chapters on geographical distribution of consumption in the United States, and on the topography and climate of the States, etc. This treatise arranges the statistics in regard to the geographical distribution of consumption in the United States so as to make them available for convenient reference in selecting localities of resort or residence for invalids, and also for those who are in health. It is made up mostly of observations of others, and it represents the most reliable data attainable. Such a work, however, must not always be taken as authority on the statistical part of its contents: because some countries, even of small area, may be very conducive to consumption in one portion and very healthy in another portion; and yet the statistical record will make it appear that the whole country is unhealthy. We wish we had the space to give the facts and figures about some of the States in which numbers of our subscribers reside; but we content ourselves by advising all parties who are interested in the subject to buy and read the book for themselves.

Hand-Book of the Diagnosis and Treatment of Diseases of the Throat, Nose and Naso Pharynx. By CARL SEILER, M. D., Instructor in Laryngology and Lecturer on Diseases of the Upper Ai Passages, in the University of Pennsylvania, etc. Third Edition, Thoroughly Revised and Greatly Enlarged. Illustrated with Two Lithographic Plates, Containing Ten Figures, and 101 Wood Engravings. Philadelphia: Lea Brothers & Co. 1889. Cloth. Demi-8vo. Pp. 373. (From Publishers.)

This is a good book, and is sufficiently well illustrated to be a self-instructor. It seems, however, for the most part, to be compiled upon the writings in former books, and not "fully up to the times." For instance, due prominence is not given to the almost specific value of ammoniated tincture of guaiacum as a local application and as an internal remedy in acute tonsillitis, etc.; and yet the practitioner would naturally look to such a work as this to see its virtues extolled, unless it becomes obsolete by virtue of something better being discovered. Nor do we find reference to any of the inventions of Dr. Joseph A. White, of Richmond, Va.—the chief of which, perhaps, is the soft-palate retractor, which possesses so many advantages over anything yet invented for the purpose, and is growing so rapidly into professional favor wherever introduced that we naturally expect to find it in use by those who are keeping an eve open to valuable improvements in practice. (Just here, we should incidentally remark that a number of instrument-makers

are making what they claim to be Dr. White's instrument for palate retraction that is no more like the original—the approved instrument—than an old-field barn door is like the neatly pannelled, smoothly fitting, well hinged parlor door of a palatial residence. Some of these imitations are farces upon the simplicity and adaptability of the original. The real design has been several times published with proper illustrations and descriptive text.)

Practical Treatise on Nervous Exhaustion (Neurasthenia): Its Symptoms, Nature, Sequences, Treatment. By GEORGE M. BEARD, A. M., M. D. Edited with Notes and Additions by A. D. ROCK-WELL, A. M., M. D.. Professor Electro-Therapeutics in N. Y. Post-Graduate Medical School and Hospital, etc. New York: E. B. Treat. 1889. Cloth. 12mo. Pp. 254. Price \$2.75. (From Publishers.)

This edition of Dr. Beard's classical work is especially valuable as the editor by notes and additions, included in brackets in the text, draws the differential diagnosis between neurasthenia and the condition of lithæmia, which is far too frequently mistaken for it. The one is a disease that comes from over-work of brain and nerve; the other from the indolence of the glutton and wine-bibber. The two diseased conditions, therefore, call very generally for exactly opposite plans of treatment, and consequently the differences between the two should be carefully studied and always kept in mind in given cases requiring discrimination. This book is the very one above all others that the practitioner should carefully study on these important every-day subjects. The publisher issues his books in excellent style, and prints with a clear distinct-face type.

Modern Treatment of Diseases of the Kidney. By Prof. DU-JARDIN BEAUMETZ. Translated from the Fifth French Edition by E, P. HURD, M. D., Newburyport, Mass. 1888. George S. Davis, Detroit. Mich. Paper, 12mo. Pp. 169. Price 25 cents; in cloth, 50 cents. (From Publisher.)

As a therapeutist, the author of this monograph has become distinguished authority. His theories are clear and well founded, his deductions good, and his observations and experiences such as to make his advice a valuable guide. Chapter I considers the kidney from a therapeutic standpoint; Chapter II mentions the diuretics and tells when and how to use them; Chapters III and IV take up the treatment of urinary lithiasis and their complications; and Chapter V is devoted to the treatment of nephritis. On almost every page formulæ of approved worth are given, and the conditions for which they should be prescribed.

Editorial.

Florida Medical Association.

We are sorry that any of the Florida Association who read papers or entered into discussion should have denied assistance to journal reporters. The failure to furnish reports or synopses of papers, etc., after presentation, does not injure any one except the Society or the authors. It is a mistaken notion of progress or self-interest not to assist the reporters for those journals who have shown the Association and the speakers the special courtesy of providing a means for them to bring their proceedings before the professional world. By the time the Society's transactions are published, in separate book form, the wheel of progress has gone so far forward as to leave the things of a half-year ago in the dim distance, and there is but little disposition to go backward. Press onward! is the sentiment of the times; and this pressure is so strong, so irresistible, that human ingenuity cannot change the direction of the force. Live, progressive journals have not the time nor the space to go back and shovel into their columns the heaps of things and savings of long ago. A Society that helps the reporters for journals is helping itself.

The bill relating to the establishment of the State Board of Health of Florida, as reported in this issue, is before the Legislature of that State as we write. As it accords with the popular wish of the profession of Florida to assume apparently all inland quarantine authority and control, we are anxious that their wish should be gratified-leaving the General Government to take charge of quarantine matters upon the seas, the means of ingress, etc. In asking to cut itself aloof, however, from so much of the control and provisions of the General Government as have been given that State in the last epidemic of yellow fever, Florida assumes a weighty expense for herself and an immense responsibility to the people of the Atlantic and Gulf sections of the United States. But Florida feels herself able to meet these responsibilities, and as she knows better than we at a distance the roads of ingress and the freaks and fancies of the terrible epidemics of yellow fever, etc., we hope her Legislature will grant just what her organized profession calls for. Quarantine is undoubtedly the element of greatest protection thus far suggested to save the State and the country; and this is the principal power that the profession of

Florida is asking to be vested in their local Boards of Health—all these Boards being under the control of a central State authority, so as to let each County Board act independently or require them to act in concert according to the emergency.

The Manufacture of Condensed Milk.

We were very much interested in an article in the New York Tribune, giving a history of the origin and development of the manufacture of condensed milk. The original Borden's Condensed Milk Factory is located in Wassaic about seventy miles from New York, and in the midst of the dairy country. Before the factory was established, there was no direct communication with New York and other markets; and countrymen then drove their cattle to market on foot, and brought their milk and other products in carts and wagons. For want of facilities for sending milk to market large quantities were thrown away. Owing to this fact, the old eccentric Gail Borden—then regarded by his neighbors as a "crank"—was enabled to pursue his research, until he finally proved that pure milk could be preserved, and used on land or sea in a state but little differing from the natural. Receiving the approval of doctors and chemists, the product finally met with immense favor as a ration for the Union troops during the war between the States. Then its fame spread across the waters, and became so popular that numerous European imitations sprang up all over the Continent. Like all other inventors, Gail Borden's original methods were crude, and he had to struggle against poverty and misrepresentations. "Curiously enough, his experiments originated in an attempt to produce an extract of beef, but as the cost of cattle for making necessary tests was too great for his narrow means, he turned his genius to milk as an article more easy to get on trust."

The milk is brought in daily from all the surrounding farms. The rule is to have it delivered in 40-gallon tins, each of which is thoroughly scalded over a jet of steam as soon as it is emptied at the factory. The standard of quality has been much improved by the rigid inspection maintained

in the interest of the Borden works.

The feed, stalls, and methods of handling milk have to conform to certain rules, as an article to attain the excellence of the "Eagle" brand must be perfectly clean, pu e and fresh. Each can is tested by an expert before it is accepted, and the slightest stale or mouldy symptom is

sufficient to cause rejection. The milk is carefully strained into the tins at the dairy, and again passes through strainers of the finest bolting cloth on its way into the great copper receiving vats. In the course of manufacture it undergoes further clarification, and finally, in the machine that receives it before it is filled into the regular one-pound tins, it is strained once more. The tins are made here on the spot, as are also the packing cases, and every corner of the immense factory is the pink of neatness and order. The employees are mostly women and girls, and are so well paid

that they appear happy and independent.

There is probably no more ingenious a device known than the automatic machine by which the tins are filled with the thick condensed milk. It is operated by one person, and is capable of filling the whole product of the factory, and yet it never runs over or spills a drop of the milk. About one barrel of granulated sugar is used with 2,000 quarts of milk, and no other substance whatever enters into the manufacture. A large quantity is manufactured for daily use in New York and Brooklyn which has no sugar added. This is probably the purest milk to be had in the metropolis. The sugar must be used in that which is tinned to preserve it.

Standing Committees of the Medical Examining Board of Virginia.

The newly elected Medical Examining Board of Virginia has elected Dr. Hugh T. Nelson, of Charlottesville, President, and Dr. Hugh M. Taylor, of Richmond, Secretary and Treasurer. The President has just appointed the following Standing Committees, for the present term of four years, as the Examining Sections:

1. Chemistry.—Drs. R. A. Lewis (Chairman), Nelson, Peek

and Dickinson.

2. Anatomy.—Drs. Taylor (Chairman), McGuire, Irving and Huffard.

3. Hygiene and Medical Jurisprudence.—Drs. Parrish (Chairman), Carmichael, Cullen, Tankard, and G. L. Stone (H).

4. Physiology.—Drs. Robinson (Chairman), Nash, Clarke

and I. S. Stone.

5. Materia Medica and Therapeutics.—Drs. Preston (Chairman), Conway, Stockdell, Neff, and M. A. Douglas (H).

6. Obstetrics and Gynacology.—Drs. Alex. Harris (Chairman), Walker, Buckner, Finney, and Taber (H).

7. Practice.—Drs. Martin (Chairman), Brown, Patterson, W. J. Harris, and Jones (H).

8. Surgery.—Drs. Latham (Chairman), Greer, Meriwether,

Moore, and Webster (H).

Legislative Committee.—Drs. Moore (Chairman), Walker, and Taylor.

Executive Committee.—Drs. Preston (Chairman), Robinson,

Nash, Nelson and Taylor (last two ex officio).

The semi-annual session of this Board will be held in the city of Richmond about the middle of April—the exact day will appear in our March issue.

Editor of the Journal of the American Medical Association.

The newly elected editor-in-chief of the Journal of the American Medical Association, Dr. John B. Hamilton, assumed charge on January 1st, 1889. He was establishing himself in the favor of all the readers of that estimable Journal when in its issue of February 9th it was announced that with that number his relation was ended. Dr. Hamilton is the Surgeon-General of the United States Marine Hospital Service, and has so well filled the duties of that office, and so fully shown the importance to the Government of such an official, that the bill before Congress to give the official a lifetenure was passed and approved during January. Dr. Hamilton is therefore to be recognized hereafter as the Surgeon-General of the United States Marine Hospital Service. Such an official position in the Government service he holds to be incompatible with that of editor of the Journal, and for that reason resigns the editorship. His resignation causes a vacancy, and a meeting of the Publishing Committee has been called to elect a successor. Until a successor is elected, the Journal will be edited by the Publishing Committee. Who he will be, we have not heard.

New Members of the Medical Examining Board of Virginia.

The Executive Committee of the Medical Society of Virginia met in Richmond, February 2, 1889, to fill vacancies in the Medical Examining Board of Virginia in accordance with the laws on the subject. The vacancies were caused by the resignations of Drs. W. W. Douglas, of Warsaw, Richmond county, J. Herbert Claiborne, of Petersburg, and Oscar Wiley, of Salem. Dr. James W. Tankard, of Burgess Store, Northumberland county, was chosen to fill Dr. Douglas' place from the First Congressional District; Dr. Paulus

A. Irving, of Farmville, Prince Edward county, in place of Dr. Claiborne, of the Fourth District; and Dr. Leigh Buckner, of Roanoke, Roanoke county, in place of Dr. Wiley, of the Sixth District. Each of these gentlemen is distinguished for his special qualifications for faithful work and competent ability—qualities that are precisely needed in fulfilling their new but responsible duties. It is a matter of regret that while the Board makes such excellent additions to its ranks, it has to lose from its body men so eminent in the State for their learning as Drs. Douglas, Claiborne, and Wiley.

Polk Miller & Co.'s Compound Pepsin Pills.

Not only do we take pleasure in calling attention to the advertisement of Messrs. Polk Miller & Co., but we wish to to call special attention to their Compound Pepsin Pills, the formula for which appears in their advertisement. For nervous dyspepsia, and for conditions arising from that disordered state, physicians will find these pills oftentimes curative and almost always beneficial as an adjuvant to other plans of treatment.

Dr. Wm. A. Hammond's Sanitarium for Diseases of the Nervous System

Opened well in November, 1888, and is doing splendidly, as we predicted it would do. It is now in full running order. It would well repay doctors who may visit Washington city during this season to visit the institution, in order to get an idea how such a sanitarium or private hospital should be conducted. Dr. Hammond devotes the hours from 10 A. M. to 1 P. M., daily, as consultation hours for patients who do not enter the Sanitarium—in other words, to private parties.

"American Resorts, with Notes upon Their Climate,"

Is the title of a work by Bushrod W. James, A. M., M. D., member of the American Association for the Advancement of Science, the American Public-Health Association, the Pennsylvania Historical Society, etc., announced to be in press and nearly ready for issue. It also contains a translation from the German, by Mr. S. Kauffman, of those chapters of "Die Klimate der Erde," written by Dr. A. Woeikof, of St. Petersburg, Russia, that relate to North and South America and the islands and oceans contiguous thereto. The book is intended for invalids and seekers after health

and longevity, as well as for those who desire to preserve good health in a suitable climate. We regret not being able to mention the price; but it is being published in Philadelphia, Pa., by the American Biographical Publishing Company.

Dr. De Saussure Ford.

As we intended to affix the titles of the authors of papers read before the Southern Surgical and Gynæcological Association, we owe it to ourselves and to Dr. Ford's friends to state that there was an unintentional omission of mention of the fact that he is still Professor of Obstetrics, Diseases of Women and Children and of Clinical Surgery in the Medical Department of the University of Georgia, in Augusta.

Surgical and Obstetrical Instruments and Physician's Library for Sale.

The surgical and obstetrical instruments, as well as the medical library of the late Dr. J. A. Alexander (formerly of Virginia), of Citra, Fla., are for sale. To any in need of such things, here is a fine opportunity. The library is a well selected one for a general practitioner, consisting of some 75 or 80 volumes—mostly in leather binding—of standard works and last editions. Among the instruments are three pairs of obstetric forceps, a fine new aspirating apparatus with needles, etc., etc. This is an excellent opportunity, especially for a young physician, to equip himself. Citra itself is a fine opening for a good practitioner who wishes a Southern home. Any inquiry about the library, instruments, etc., may be addressed to Mrs. Dr. J. A. Alexander, Citra, Fla.

A Cyclopædia of the Diseases of Children—Medical and Surgical—

Is announced in press by the J. B. Lippincott Company, of Philadelphia. The authors are American, British and Canadian doctors of recognized ability, and the four imperial volumes (to be sold by subscription only) are to be edited by Dr. John M. Keating, of Philadelphia. Volume I will appear in April, and the subsequent volumes at short intervals. This is the only work of the kind published in the English language, and its range of subjects and its eminence as authority will make it invaluable to the practitioner.

Obituary Begord.

Dr. William A. Gray

Died at his home in Fluvanna county, Va., December 25, 1888, at the ripe age of 82 years. He was born December 21st, 1806. After a thorough training in the classics, he studied medicine in the University of Pennsylvania, from which institution he received his degree of Doctor of Medicine in 1830. He began practice soon thereafter in his county, and it was not long before his ability and faithful discharge of professional duty extended his daily practice into the surrounding counties. He was married in 1831. Of his five children, one is Dr. William B. Gray, of Richmond. Va., some of whose contributions to medical literature have attracted much professional attention in the way of a possible advance. We refer especially to his paper on "Diagnosis of Pregnancy by the Changes of the Phosphates in the Urine." Dr. William A. Gray continued in active practice until a few years ago. He was everywhere recognized as an able professional man, a Christian gentleman, and a valued friend. He was a devout member of the Baptist Church, and his noble deeds of Christian charity are left as a part of his record, worthy of imitation by any one who strives to be a Christian doctor.

Mr. Jordan W. Lambert

Died at his home in St. Louis, Mo., January 6th, 1889, after a lingering illness of typhoid fever. He was born in Alexandria, Va., in 1852, and leaves many relatives and friends, especially in that city and in Richmond, Va. He was especially well known throughout the medical world as the manufacturer and proprietor of "Listerine," which ranks pre-eminently among the long lists of antiseptic surgical washes and dressings, and yet is so harraless and pleasantly aromatic as to be popular among the toilet articles of ladies' chambers. Mr. Lambert was distinguished personally by his remarkable energy and thrift in business, unselfishness in the help of those needing assistance, and earnestness of friendship which kept him always in the highest appreciation by all who knew him. While a student at Randolph-Macon College, Va., somewhere about 1869 or 1870, he was enthusiastic in the material development of the surroundings of that institution, without, however, sacrificing anything from his position as a thorough student. And recognizing the want of a literary hall, he

set himself to work to raise some \$10,000 or \$12,000 to erect. a suitable building; and through his indefatigable effort and impressive influence there now stands the handsome Franklin and Washington Literary Socities' Hall on the campus of that institution, at Ashland, Va., as a monument to him. About 1871 he moved to St. Louis and became a clerk in the house of Mr. Mellier. About 1875 he established a separate factory in his own name for the manufacture of "Listerine," and his enterprise was so successful that it was not long before he became one among the most prominent of the business men of his adopted city. When the American Medical Association met in St. Louis a few years ago, it was he principally who planned the magnificent entertainments for the visitors which made all return home with the highest praise of the hospitality of St. Louis people. He was prominent also in politics, and many of those who were delegates to the National Democratic Convention which met in St. Louis some months ago will remember him as the genial, whole-souled Chairman of the Committee of Arrangements, whose whole time was given to the proper entertainment of the delegates from all parts of the country. But in all his enthusiastic desire to give a "boom" to the city of his adoption, he never lost sight of his native State nor lessened his efforts to build up her interests. Whatever might be the pressure of business or demands upon his time elsewhere, he kept it as a standing engagement to attend the sessions of the Medical Society of Virginia. did not come as a business man to laud his manufactures. In fact, he came to display his goods only when solicited to add to the elegance and attractiveness of the Exhibition Halls in Richmond. And the Secretary of the Virginia Society records it now only because the diffidence of Mr. Lambert would not permit him to make acknowledgment while living, that on several occasions Mr. Lambert offered any amount of pecuniary contribution that might be necessary to make the sessions perfect successes, so far as financial help could secure success. His special interest in all that relates to the profession of his native State will be sadly missed, while those who knew him (as many did) will mourn his loss to them as personal affliction.

Up to the time of going to press with this (February) No., we have not heard that there will be any interruption to the continuance of the business firm of the "Lambert Pharmacal Company," of St. Louis, Mo. If there should be, it will be noted in the advertisement on the page facing second cover

of some subsequent issue of this journal.

VIRGINIA MEDICAL MONTHLY.

VOLUME XV—No. 12.

WHOLE NUMBER, 180.

RICHMOND, MARCH, 1889.

Original Communications.

ART. I.—Trophopathy in Heart Diseases (Opus 266).—A New Standpoint for Cardiac Affections (after Salisbury.) By EPHRAIM CUTTER, M. D. (Harv. et Univ. Penn., M. A (Yale.) LL. D., (Iowa), Hon. F. S. Sc. (London) Author "Boylston Prize Essay," 1857, on "Under What Circumstances do the Usual Signs Furnished by Auscultation and Percussion Prove Fallacious?" "The Salisbury Plans in Consumption," "Galvanism of Uterine Fibroids," "Thyrotomy Modified," "Primer Clinical Microscope," "The Clinical Morphologies," etc., etc., New York, N. Y.

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I. Introduction.

A Fatal Case of Cardiac Fibrinous Concretions.*

A quarter of a century ago, a New England physician died suddenly when he had apparently made an improvement in an inflammation of the lower lobe of the left lung which had progressed to the ninth day. For four years or more he had suffered with terrible trip-hammer palpitations of the heart, when death was imminent. He would gasp for breath; his head was covered with sweat; face livid, especially the lips—and had he not been a man of great firmness and calmness of mind, he would probably have died long ere he

^{*}Benjamin Cutter A. M., M. D., obit. March 9th, 1864.

did. The heart's area of dullness on percussion was twice the normal size. The impulse of the heart was purring or thrilling. The sounds were lost in an inextricable confusion, that baffled diagnosis. There were no normal sounds of the mitral or semilunar valves. To all of his medical brethren and to himself, he presented the signs and symptoms of "heart disease" used in its conventional sense.

The autopsy showed hypertrophy; no disease of the semilunar or auriculo-ventricular valves; but in the aorta, there lay a digitate fibrinous concretion, eight inches long, half an inch wide and one-eighth inch thick. Its base was planted and fixed in the columnæ carneæ of the left ventricle, and its body reached through the left semilunar valve eight inches. The surface of the concretion was ridged or furrowed longitudinally—like the fine finish on nice furniture. At the distal end was a new accretion of the same diameter and about an inch in length, which broke down into clots and bloody serum when rubbed between the fingers, while the body of the clot resisted breaking down under the same treatment; and under the microscope, looked like organized fibrin. Besides this concretion, there was another like it of the same length, diameter and physical appearances, which arose in the columnæ carneæ of the right ventricle, passed through the right semilunar valve, and into the pulmonary artery. It was the mate of the fellow of the left side of the heart.

To the medical men who were at the autopsy (and there were several), these two fibrinous concretions or polypi were a sufficient cause of the death and of the cardiac symptoms so marked for years. Still the gentleman who did the autopsy, eminent in his profession, used to his business and authoritative, cast these concretions aside as of no account, and said the autopsy did not reveal any sufficient cause of death.

As to the cause or origin of these concretions, he could give no explanation. All he did was to ignore them, and left the situation darker than before he came, as there was no doubt in the minds of the thoughtful medical gentlemen, who had seen the dead man have an attack of palpitation, but that there was something the matter with the heart.

With disrespect to none, it will be the aim of the writer to show as well as he can that—

(a). These concretions were directly connected with the cause of death; (b). The prime cause of the concretions was in the food eaten; and (c). The cure of such cases lies in removing the cause—that is, bad feeding—and in replacing it with good feeding.

It is wonderful that the man lived as long as he did in spite of his disease. He had an inquiring mind; was zealous for the truth. Were he alive he would be most interested in what follows as throwing light upon a disease which, conventionally, is passed over as trivially, as the operator did at the autopsy above referred to.

A—The fibrinous concretions were directly the cause of death.

If not, then the case was inexplicable; for on no other rationale, would the four years' cardiac disturbance be explained. There was no other cause for the hypertrophy, and the absence of interstitial valvular lesion was remarkable. The concretions were old, as shown by the terminal new blood black digitate finials which looked like the summer growth of an ash tree sucker. Then the concretions were curiously digitate at the free ends, and longitudinally scored by the constant passage of the blood stream over them for so long a time. The body substance was solid.

The concretions were the cause of death, because they obstructed the valves of the heart. It is wonderful that the heart did its work at all; but it went on doing it, growing bigger and stronger all the while from the extra-exertion. Looking on the heart as an automatic organ, girted with independent multipolar nerve centers, which, so to speak, "run it," we can, in our automatic independent cerebral nerve centers, conceive of the cardiac nerve centers being very much distressed by the incarceration of these great organized clots, caught in the columnæ carneæ of both ventricles, running through the semi-lunar valves of the aorta and the pulmonary artery, and reaching far into these vessels, like eels in water pipes. But eels could not have survived the constant opening and closing of the valves of the hydrant, nor would these hydrant valves have performed their work as the heart-valves in this case did for four years.

It is not a marvel this heart ceased to beat when it did, but it is a wonder it beat as long as it did,—clogged, stopped, and its valves and ventricles occupied with two such voluminous fibrinous concretions. Much less mechanical obstruction has caused death in other cases.

Again, allowing that this was not the case, then we can fall back on the hypertrophy as a cause of death; and as the hypertrophy resulted from the increased work the heart had to do, because of the concretions, we are led back to these concretions as a cause of death.

To be sure, these concretions were remarkable from their age and consolidation and showed the effect of the physical forces of the blood stream rushing like a race horse and plowing longitudinal furrows in them, under great pressure to and fro, eighty times and more a minute. But they were present and exerted an influence that cost a life. We will discuss this subject concretely to make the impressions more exact and vivid.

B—The prime cause of these concretions was in the food.

What were they made up of? (Answer). Fibrin. The microscope showed this.

Where did the fibrin come from? (Answer). The blood.

How? (Answer). Fibrin is always found in healthy blood. It exists in minutest elastic filaments spun from the fibrin cells of the spleen and lymphatic glands, invisible in the blood stream to the naked eye, but appearing plainly enough when aggregated into a crassamentum or clot. Usually this clot catches all the red and white corpuscles in its millions of minute meshes, and the clot looks like a mass of quaking living jelly. Carefully wash out the corpuscles, and then the snow white fibrin appears and looks, under the microscope, like the concretions we are considering. Thus there is no difficulty in accounting for the presence of fibrin in the blood stream of health, enough to make up the concretions in question. But allowing this, the presence of the concretions is not explained, because we should expect to find them in everybody's heart on this supposition.

Certainly we know these concretions are not found in healthy persons, for the simple reason that the fibrin is in extremely fine and delicate filaments; that the fibrin filaments do not adhere to each other and thus aggregate into masses of fibers, skeins or thrombi, and form no obstacles in the blood stream.

In *rheumatic* conditions of the blood and in fibræmia, we find the fibrin filaments:

1. Are thick, strong, massive threads.

- 2. Form on the microscope slide a thick network of strong meshes.
 - 3. Sometimes in skeins.
- 4. In tangled, curled, twisted masses with ends sticking out in all directions.
 - 5. Sometimes in gelatinous colloid masses.
- 6. Sometimes in thrombi of greater or less size, formed by aggregations of massive, sticky and strong fibrin filaments, in and by the action of the blood stream.

7. Sometimes these masses enclose crystalline bodies, red and white blood corpuscles, as plums in a pudding.

- 8. Usually this abnormal condition of the fibrin filaments is accompanied by a stickiness of the red corpuscles, so that they huddle and crowd together like frightened sheep. The difference this makes with the heart's work is something enormous and deserves a separate consideration later.
- 9. The white blood corpuscles sometimes become adhesive. In fibræmia, the white blood corpuscles that spin the fibrin filaments, and called the "fibrin cells," are in large excess and the fibrin accumulates in long, large skeins, while the blood may not be termed rheumatic. (Salisbury.)

C—The inside of the ventricles of the heart is a favorite place for the deposition of thrombi.

Why? (Answer). 1. The net work of the columnæ carneæ arrests the floating fibrin skein filaments, and aggregates them mechanically as a sieve placed in the waterways of an aqueduct, and the particles attach themselves to the surfaces, by the stickiness of the epithelial secretions.

2. The ventricles are cul-de-sacs, admitting the blood by

the auriculo-ventricular valves. Then the blood impinges against the ventricular walls, and is by these very walls instantly repelled and forced through the aorta and pulmonary artery in an opposite direction from which they entered. It is natural that the more liquid portion of the blood escapes slower; or as the ventricular cavity is rendered smaller, the fibrin filaments catch in the smaller columnæ carneæ and heart strings. It is probable that the ventricles do not wholly empty themselves in their contractions, and that there is residual blood left in them just as we have residual air in the lungs during respiration; hence there is a stasis-short indeed, but long enough to catch the sticky adhesive fibrin filaments in the strings and columnæ carneæ of the heart. Once caught, other clots are added from time to time, as was seen in the case of fibrinous concretions related. This, by the way, was done in the full force of the blood stream (which only makes the position here taken stronger); but it is probable that the blood did not move with the force and celerity of health, since the vessels and valves-all of them-were so much obstructed.

Be this explication as it may, the result is the same. Heart clots are more common than in any other part of the body. The records of heart disease are dotted with accounts of them from early ages.

The question here raised is, Where and how are they formed? At the risk of repetition, for the sake of clearness and practical value, we will go over the search carefully.

- 1. The fibrin belongs in the blood, spun from the white blood corpuscles; but when the spleen is in normal condition, no thrombosis results.
- 2. In abnormal conditions, the fibrin filaments grow thicker, stronger, denser, more massive, aggregate in skeins, long, narrow and straight, or twisted and curled in every direction, or in gelatinous protoplasmic masses like colloid matter or jelly.
- 3. There is no need of looking for a nucleus of an epithelial cell or vegetation in the blood to form a point of deposit by gradual accretion as in the case of vesical calculi-

They are already in the blood in an exquisitely delicate transparent minuteness, finer than the fibers of gossamer silk; but by the abnormal condition referred to, the fibrin filaments have undergone the changes named into massive, strong and sticky threads.

4. Along with these are found crystalline bodies of great variety, beauty and color, often occurring in various shapes: (a). In minute granules. (b). In angular and broken fragments. (c). In plates of irregular shape and outline, sometimes with reentrant angles. (d). In regular crystals, which are sometimes perfect but often abraded, worn, scratched and marked by the physical impressions received in the very active movements of the blood. They have not all been made out, but the following have been often seen: (1). Oxalate of lime. (2). Cystine. (3). Triple phosphates. (4). Uric Acid and urates. (5). Carbonate of lime. (6). Hippuric acid. These are enough for our pur-Then the pigment matters of the blood stream are very common and very unknown. Black, bronze, hyaline, mazarine blue, yellow, orange, mineral-looking substances are passing in the blood along with the fibrin filaments in abnormal states. (See, A-5, 6, 7; B-9, 10, 11, 12 and 13 Bibl.)

For practical purposes, it is not necessary to stop long to consider the nice technical distinctions and to find out the exact chemical nature of these bodies, though it is very desirable. We are somewhat in the condition of practical farmers who raise fruit successfully without ever knowing the botanical names of their crops. The great practical question is—

D—How did these fibrin filaments come to be in these abnormal conditions varying somewhat with the patient and surroundings?

The reply is, from the food; or, to put it differently, in imperfect alimentation.

How do we know this? (Answer). Simply by the fact that these abnormal conditions, which we will for brevity call "thromboses," have been, by changing the diet to articles of

food that digest easily, quickly, and with the minimum amount of nerve force, also without alcoholic or vinegar fermentation in the alimentary canal, entirely removed and the fibrin filaments restored to their normal characters. This has been done so many times that there is no doubt of it. Or if the doubt lingers, it has been dissipated by pursuing the opposite course, to wit: Changing the normal fibrin into the abnormal thrombosis by feeding fermenting food; so that, removing the fermenting foods from the diet and feeding on unfermenting or perfectly digesting foods, the thrombosis is cured, and vice versa.

This is the truth in a nutshell, or the figure is a portrait; the environments of which that make up the whole picture are to be added.

Of course the environments make a great difference. You may have a locomotive fired up and ready to run, but if there is no track, it will not go far; still the steam is the essence of the kinetic power, whether the locomotive moves or not. The steam is a predisposing cause. So with food; it is a predisposing cause of thrombosis, which long and often continued, results as described. Diseases have a way of being latent and suddenly becoming active. Take cases of sudden death from embolism in the puerperal state. Here the cause (predisposing) consists in the minute thrombi in the blood, ere confinement. They are readily detected by the microscope. The labor may be called the exciting cause, which with the other, produces death. It may be said that proper feeding averts such embolism.

To illustrate farther, rheumatism has two causes; the predisposing and the exciting. The predisposing, is the unhealthy alimentation causing the peculiar morphology of the blood alluded to, and the exciting cause, is the action of cold contracting the blood-vessels, thus stopping the transit of the thrombi, crystals, etc. A stasis of the blood follows, which may become active, and thus we have inflammatory rheumatism. To use another simile, the predisposing causes are like the loading of a gun, and the exciting causes are like the pulling of the trigger, igniting the percussion-cap and exploding the gun. It is difficult to carry these distinctions through this description; but when causes of disease are spoken of, they both, *i. e.*, the predisposing and exciting, are always meant.

If there are people who eat the foods to be alluded to without an actual exhibition of thrombosis, it does not follow that it does not exist in a latent condition, to be revealed by the use of the microscope, any more than one can consider a gun harmless because it does not go off when pointed at you, "for fun." The powder may be there, but is potential only-not in actual kinetic energy, for the want of an exciting cause. Indeed, this is the case in so many deaths reported from the accidental discharge of firearms. Taking our concrete case of fatal thrombosis, and applying this principle to it, for example, it can be said as it could not have been said twenty-five years ago, that these tough thrombi came through unhealthy alimentation, and that they are curable through healthy alimentation, the results of which would be the solution and removal by Nature's own processes of absorption and excretion, because she—to put it more forcibly—had the means of so doing placed within her reach (besides being relieved from the operation of the causes of the thrombosis); and she rights things herself by her laws constantly operating, somewhat as a ship with spars tipped so as to dip in the sea, rights herself when the cargo is shifted to its proper place. Men say: "We have righted the ship." "Oh, yes, you have moved the cargo, but the law of gravity (Nature's law) acted to right the ship: you have done it in and through Nature's law." Just so physicans cure diseases, by stopping causes which operate to produce them, but Nature does the cure after all.

E—The vis medicatrix naturæ, or nature's efforts to cure, should be always remembered.

They were never more palpable than in this case of double cardiac thrombosis. The hypertrophy was a direct result of the efforts of the cardiac automatic nerve centres to keep the heart at work at the citadel of life. Had this case been treated, as is here suggested, when the concretions were removed, the hypertrophy would have ceased, simply because there was less work to be done. Talk about governors

to steam engines, the automatic nerves of the heart are the best governors in the world; they are one factor in the vis medicatrix nature.

Another factor is the constant change going on in the system, whereby our bodies change all over once in seven months, according to Sir Lionel Playfair. This is true, in my opinion, save as to nails, teeth, and hair. The conventional idea is, that it takes seven years to do this work. Another conventional idea, in this connection, is that diseased tissues and organs are not subject to such changes once in seven years.

It is high time this idea was dissipated, in my opinion, based on experience of a practical kind. I am sure that tumors—malignant and benign—neoplasms, heterologous tissues, are amenable to nutrition and subject to interstitial changes of substance in the same manner as the healthy; indeed, some of the abnormal tissues run through their phases much faster. (See A—7; B—20, 38 and 39, Biblio-

graphy appended.)

As a matter of fact, and it is a most important fact, in the treatment of organic disease, the structural lesions of the heart are more amenable than those of almost any other organ; that is, it has been found, in cases where there are other organic lesions besides the cardiac associated therewith, when they are put on diet, that the heart lesions get well amongst the first, and, so much so is this the rule, that amongst those who have thus treated these diseases, it is such an ordinary and expected result, that they have become accustomed to it, and it has ceased to be to them an impressive, grand, and wonderful fact in therapeutics, and almost escapes notice. But it is nevertheless a grand and striking fact in modern therapeutics, that deserves to be better known in the name of all who suffer from heart diseases. The writer feels his own position to be impressively responsible, not only because his paternal family history shows a long list of males dying of heart disease at about sixty (60) years the age of the concretion case—as, but for these discoveries, he himself would probably die in the same way. But, aside from these personal considerations, he feels that other hearts

are worth keeping a beating and working out their honest, honorable livings, compassionate desires and feelings, to the natural end of life. The life that went out in the case reported, was inestimably valuable, and belonged to a medical man, who did great good in the community where he lived, in all the relations of his terrestrial existence. are others like him worth saving. May it be done? this case eaten less of food from the vegetable kingdom and more of food from the animal kingdom, humanly speaking, the thrombosis would not have occurred; or, to put it in another way, had he fed on animal food, he could have been treated with the same prospect of cure of the thrombosis, hypertrophy, and other organic lesions, which depend on feeding, that is had in typhoid fever or pneumonitis. And this comes by acting on the principle of common sense and rational medicine; not by substituting another disease (Allopathy), nor by substituting a like disease (Homeopathy), but by removing causes and letting Nature cure by the normal operation of her laws, processes, functions, and vital phenomena, i. e., rational medicine. Or, if there must be a pathy, trophopathy (trophos-food: pathos-disease).

This is a grand exhibition of true scientific medicine that appeals to common sense, and marks, in the opinion of the writer, one of the greatest advances in medical knowledge of the age, worthy of patronage by the broadest, most cultured, high principled, intellectual, and educated minds.

It is a decided, positive, actual, solid, and substantial advance in the knowledge, science, pathology, diagnosis, and treatment of heart diseases, so-called. It adds a wreath of honor to the already ennobled profession of medicine, and brings our age abreast of, if not ahead of, all that has preceded it, and, possibly, that may follow it for a long time to come. It sheds light on therapeutics, and shows its valuable place in medical art, for it points out its real use and place. It does not unduly exalt or depress medicines in estimation; it tends to introduce a race of whole (holy) men on the earth, whose sound hearts will make them do better work for their day and generation, live longer to do that

work, and thus be better investments of capital spent in education and support.

It throws light on heredity, showing that it is more in food (feeding on the same or like foods) than in consanguinity.

It shows the tremendous power of food to cause and cure disease of an organic and functional nature.

It shows what a wonderfully exact and precise combination is the human body.

It shows how rapid its interstitial changes and metamorphoses are.

It shows how directly strength depends on food, and vice versa.

It shows how that it is work to live. (What a labor the heart in question did!)

It aims to indicate food of the right kind, in proper quantity, and in proper proportion relatively.

It shows how senseless it is for eating to be done alone on the ocular, gustatory, aural, touchal, or tactile decisions, that this thing or that is good for food.

It shows how important are the chemical, structural, and pathological aspects for food, and how much the welfare of the country depends on the food of its inhabitants.

Some of these points are named for enforcement farther on, and to impart an idea of the importance of the subject.

With this introduction, we proceed to a more formal presentation of the subject in a more technical way.

II. SYNTHESIS OF HEART DISEASES.

(A). Experiments on animals to produce heart clots or thrombosis.—(See Bibl. A—1.)

One hundred swine fed on good, sweet, sound corn and water, were slaughtered for market, and their autopsies showed no heart clots or thrombi, indicating that thrombosis is a diseased condition.

One hundred swine that were fed on whiskey slop in a state of fermentation—that is, changing into vinegar from

alcohol, died within two months, and their autopsies showed, in every case, clots or thrombi in the heart.

The following cases are selected as samples of positive evidence: that the synthesis of thrombosis is in a sour vinegar food, solely subsisted on for a length of time. It should be said, that all the swine thus treated (for there were very many more) did not die of this embolism, but from the butcher's knife. It is a very important fact, not to be forgotten, that there is an elimination of the vinegar from the system by the powers of nature. Thus, while some do not recover, but manage to live in a diseased condition, any exercise or violent action, as over-driving, would cause very many more to die. As it was, about one-quarter of the whole number of swine died in eight weeks' time from the beginning of this special feeding on acid slop of distillery refuse.

Some Autopsies of Hogs Dead from the Exclusive Feeding of Distillery Slop. (See Bibl. A, No. 1.)

Case 1.—Died 8 A. M., having been laboring under a severe diarrhea for about three weeks, and with "trip-hammer" pulsations of heart for the last fourteen hours before death. Was very sluggish yesterday afternoon, with the nose to the floor, and reeling from side to side in walking; refused to eat, appeared to be blind and deaf. Surface of body blue.

Post Mortem, 10 A. M. Body still warm; weight, 200 pounds, and in good condition; surface blue; brain highly congested; meningeal vessels gorged with clotted blood. Pericardium filled with serum; serous membrane covering the heart, covered with a mamillary deposit of partially organized fibrin; color of a whitish blue; no exuded blood. Heart contained a thrombus. Left lung completely filled with clotted blood and mucus; swollen, blackened and softened, with an odor of decay. Right lung considerably congested, so as to be rendered quite useless before death. Upper portions of lungs filled with tubercles. Vessels of intestines filled with clotted blood. Stomach highly congested and black with clotted blood; filled with fermenting food and mucus. Kidneys blackened, and filled with small clots of blood. Diaphragm congested, and apparently gangrenous in spots. Death caused by thrombosis and embolism.

Microscopic Examination. Cut off the ears ten hours before death, and soon after the "trip-hammer" pulsations began. The surface was already blue. The blood was so thick it would

not flow, but barely oozed out, and piled up in a thick dark clot, which showed plainly that it was already clotted in the vessels. It was found full of small masses of the spores of mycoderma aceti. The same vegetation, with many spores of saccharomyces, filled the fermenting contents of bowels.

CASE 2.—Weight, 180 pounds; fair condition. Had been suffering with chronic diarrhea, or consumption of the bowels, for over two weeks. Died this morning at 7 o'clock in the last stages of its disease. It discharged from nostrils and mouth a considerable quantity of mucus.

[This is common in all cases where the lungs are seriously

involved.]

Post Mortem. Lungs gorged with black, clotted blood, except a small portion around the edges. Color of lungs, black, mottled with red and pink spots. Some small tubercles scattered all through the lungs. Pelves of kidneys and ureters gorged with clotted blood. Stomach gorged with blood near pyloric orifice; filled with fermenting food and mucus. Intestines slightly congested; large intestines thickened; other organs healthy. Death caused by embolism in lungs and kidneys. Small masses of spores of mycoderma aceti were numerous in the blood, and the fermenting contents of bowels were filled with the same spores and those of alcoholic yeast (saccharomyces).

Case 3. Symptoms before death: Had chronic diarrhœa for about three weeks; was taken November 5th, early in the morning, with "trip-hammer" pulsations of the heart; ceased to eat; became dumpish; nose to floor; reeled in walking; head held to one side; left ear loped; shakes head frequently. At 4 P. M. fell over one one side and began to twitch spasmodically, with trembling like ague. Breathing quick and labored; pulse quick, short and spasmodic; surface blue on under part of body; warm, up to fever heat; frothing at mouth and nostrils; froth bloody. These symptoms continued till 4.15, when, after a general tremor for a few minutes, breathing ceased.

Post Mortem immediately after death. Lungs gorged with black, clotted blood. Stomach and large bowels thickened, and filled with mucus and fermenting food. The lungs contained many small tubercles. Death from embolism in the

meningeal vessels and lungs.

Case 4.—11 A. M. Large white hog weighing 350 pounds. Died last night; still warm. Passed from bowels considerable blood before death. Had diarrhea (or consumption of bowels) for over three weeks previous to fatal attack. "Trip-hammer" pulsations of heart began yesterday forenoon, and soon after, the animal was unable to walk or stand. Respirations and pulsations about 40 to the minute.

Post Mortem at 11 A. M. Surface not blue. Brain and

meninges congested. Pleural cavity contained one quart of effused bloody serum. Lungs filled with small tubercles. Right lung adhering to wall of chest, and filled with clotted blood, except the upper lobe, and all around each one the tissues were gorged with black, clotted blood. Large intestines thickened. Stomach and bowels filled with black, clotted blood. Liver softened and white. Kidneys normal. Death caused by embolism of lungs and bowels. Blood contained an unusual quantity of small masses of spores of mycoderma aceti and saccharomyces cerevisiae.

Case 5.—November 16, 4 P. M. Seven hogs have died since 10 A. M. yesterday. *Post Mortems* were made of six of them. All had suffered with chronic diarrhea, or consumption of bowels, for over three weeks. The "trip-hammer" pulsations began in all from ten to fourteen hours before death.

Post Mortem of one that died last night: Surface not blue. Weight, 190 pounds. Brain highly congested, with considerable surface effusion. Chest and abdominal cavity contained from two to four quarts of effused, black blood and serum. Lungs gorged with black, clotted blood, and filled with small tubercles. Liver white, softened and enlarged; falls in pieces on handling. Kidneys gorged with blood and softened. Blood in abdominal cavity comes from bursting of ureters; that in chest from effusion. Heart gorged with black, clotted blood and softened. Stomach and intestines highly congested and softened. Lower bowels thickened. Immediate cause of death, embolism of lungs, liver, kidneys, stomach, bowels and heart. Blood and contents of bowels unusually full of the yeast vegetations found in previous cases.

Case 6.—Post Mortem November 18. Weight, 200 pounds. Brain and meninges congested, and covered with effused bloody serum. Right lung broken down, except a small portion of upper lobe, which is filled with tubercles. Liver congested. Large intestines thickened and filled with a jelly-like mucus and fermenting food. Kidneys congested. Blood and contents of bowels full of the yeast vegetations found in the previous cases. Immediate cause of death, embolism of left lung and brain. This hog had a severe cough for several weeks. The cavity formed by the broken-down lung was partially filled with pus. Although this hog died of embolism, if this had not occurred, it would soon have died of consumption.

November 19th. Three hogs have died since the 17th. Did not make post mortem examinations of them. They had had chronic diarrhea for about four weeks. "Trip-hammer" pulsations of heart some hours before death.

November 28th. The hogs have ceased dying in the pens. Of 624 which were penned on October 4th, only six have died

since the 19th. All appear healthy and vigorous. Did not make post mortem examinations of these six. The hogs began to die in pen October 20th—just sixteen days after having been put on slop—and continued to die up to November 28th; about eight weeks after being placed on this food. During this period 154 died in the pen of 624. The average death rate during this period was 3.95 per day. The first fifteen days it was five per day; the next eleven days, 6\frac{3}{11}ths per day, and the last eleven days, \frac{10}{11}ths per day. Percentage that died, 24.63. Post Mortems were made in 58 cases, taken indiscriminately.

October 25, 1888. Another lot of hogs, just driven in from the surrounding country, where they were purchased from farmers, were placed in another pen, and put upon the slops from the whiskey distillery. The slop is the residue from the steam stills, after distilling off the "high wines." It is always very sour, from the presence of acetic acid (vinegar), and is filled with alcoholic and vinegar yeast (saccharomyces cerevisiæ and mycoderma aceti). The hogs were all in the finest and healthiest condition, and would average in weight 170 to 180 pounds.

By way of explanation, I will here state that each bushel of slop contains about four drachms of acetic acid. Of the 78.66 per cent. of nutritious matter in corn, all is used up in the process of whiskey making (alcoholic fermentation) but 12.50 per cent., which is itself partially decomposed. This renders the slop worth for fattening purposes, less than †th or †th that of the grain. When the hogs are on full feed, each hog is allowed eight gallons per day. During the first eight weeks, however, the new are kept on short feed, and each hog is only allowed five gallons per day.

October 25th. Fed ravenously. Wanted more feed than was allowed them.

October 26th and 27th. Feeding ravenously; very active; squealing and tearing about the pen; fighting, and very uneasy.

October 28th. Beginning to get costive, and bloating up with wind. Still ravenous for more food; very uneasy.

October 29th. Becoming quite constipated, and very much bloated. Stools hard, and becoming darker and more scanty.

October 30th and 31st. Constipation increasing, and bloating from flatulence. Stools scanty, seldom, dark-colored and hard; still hungry, but less ravenous for food.

November 9th-13th. Constipation giving way to spurts of diarrhea, with great quantities of wind. Hogs seem more or less dizzy, reeling in the walk sometimes, and less ravenous for food. Up to this date, four hogs have become so injured in the pen by fighting, that they have been slaughtered.

Case 7.—November 13th, 3.30 P. M. The first hog that died weighed 133 pounds. On making post mortem, found all the organs healthy except the brain, which was gorged with clotted blood, with a blood-vessel broken. Died suddenly by the feeding trough. Immediate cause of death, embolism of brain. Lungs contained no tubercular deposits. bowels were filled with fermenting food. Post mortem was made immediately after death, and the blood was found clotted and thickened in heart and in all the large vessels.

November 14th-18th. Diarrhoea in all the hogs. Passages watery, numerous, and accompanied with great amount of carbonic acid gas. Stools large and very light colored; full

of alcoholic and vinegar yeast vegetations.

Case 8.—November 19th. Hog died at 12.30 P. M. Had been sick about 36 honrs with "trip-hammer" pulsations, during which time it would eat nothing; nose held to floor, and reeled in walking. Partially deaf and blind, and partially paralyzed, especially in all the posterior parts of the body. Had chronic diarrhea for about two and a half weeks before death. One lung was filled with black, clotted blood; the other filled with bright red blood, partially clotted. Heart filled with long strings and lumps (thrombi) of partially organized white fibrin. Pleura congested and inflamed. Kidneys congested, and pelves contain clotted blood. Bladder highly congested. Liver healthy in appearance. Stomach filled with bloody serous fluid. Mucous membrane towards the pyloric orifice highly congested and inflamed. Duodenum in the same condition as pyloric end of the stomach. Intestines highly congested and thickened, especially the colon. Brain congested, with slight effusion of bloody serum. Blood and contents of digestive organs filled with yeast vegetation, the former containing vinegar yeast only, and the latter vinegar and alcoholic yeast. Immediate cause of death, thrombi and embolism of lungs, kidneys, stomach and intestines.

Case 9.—Weight, 125 pounds. In fair condition. Had suffered with chronic diarrhea for over three weeks. "Triphammer" pulsations began twelve hours before death, and were unusually severe. Surface blue. Lungs gorged with black, clotted blood, and cavity of chest contained many small tubercles. Heart filled with blood clots and thrombi during the violent "trip-hammer" pulsations of heart twelve hours before death. Surface blue. As soon as dead, opened body. Heart was still spasmodically contracting and jerking.

although entirely emptied of blood. Pericardium and heart seemed healthy and natural, aside from a thrombus extending into and partially through the organ. Lungs—the upper lobes and posterior portions were congested, softened and blackened with extravasated blood. The anterior and lower portions were also congested, but so recently and partially that no extravasation had taken place. Cavity of chest contained about three ounces of effused bloody serum. Diaphragm congested and inflamed. Stomach congested and enlarged. Cavity empty and covered with slimy, offensive mucus. Microscopic examination of the contents of the stomach and intestinal canal determined the presence of the minute spores of the acetic ferment (mycoderma aceti).

Symptoms before death: Was taken with "trip-hammer" pulsations of heart twelve hours before death. As soon as these began, he ceased to take food, became listless, dumpish and insensible to surrounding objects; held his nose down to the floor; eyes dull, heavy and glossy; staggered about, hardly able to support himself upon his legs. Soon the surface became blue, the hind portion of the body paralyzed, and the animal, unable longer to walk, fell over on its side and

soon expired.

CA E 11.—A large barrow, weighing about 300 pounds, was taken with the "trip-hammer pulsations" in heart, November 2nd. He immediately refused food, became listless, gradually became more and more paralyzed, blind and deaf, and finally fell over and suddenly expired to-day, at 1 P. M., November, 4th. He had severe diarrhoa for about three weeks previous to death. Surface blue. Post mortem 3 P. M. Body still warm. Brain and meningeal vessels congested, with slight exudation of serum. Chest contained about a quart of clear serum. Pleura covered with a membrane of partially organized fibrin. Right lung gorged with black, clotted blood, but involved more recently than the right lung. Diaphragm gorged with black, clotted blood. Stomach highly congested. Mucus lining a dark red. Intestines and mesentery and peritoneal membrane congested. Liver gorged with black, clotted blood. Pericardium but slighted affected. tending entirely through the heart and down the aorta. caused by thrombosis and embolism. Minute tubercles noticed in The blood contained the pores of the all parts of lungs. mycoderma aceti, and the contents of the bowels, the vinegar and alcoholic yeast plants of fermenting grain.

Case 12.—Weight 95 pounds. In poor condition from having suffered with severe chronic diarrhea for about twenty days. "Trip-hammer" pulsations began about ten hours before death. Surface blue. Lungs gorged with black, clotted blood, and contained in upper portion small tubercles. Cavity of chest contained about six ounces of clear serum. Heart

filled with blood clots and had several thrombi passing through it and extending down in aorta. Pericardium contained about four ounces of effused serum. Liver gorged with black, clotted blood. Spleen highly congested. Stomach and large intestines highly congested and thickened, and contain slimy mucus and fermenting food. Kidneys congested. Pelvis and uterus contain small clots. Urine in bladder, bloody. Other organs apparently healthly. Blood and contents of bowels contain the same kind of yeast vegetations as were found in the cases previously examined and described. Immediate cause of death, thrombi in heart, and emboli in lungs, liver and kidneys.

Case 13.—December 5. One hog died last night; weighed 130 pounds. In rather poor condition from having suffered with chronic diarrhea, (consumption of the bowels) for about three weeks. "Trip-hammer" pulsations began about twelve hours before death. Surface blue. Lungs gorged with black. blood, and contained several deposits of small tubercles, some of which were softening. Cavity of chest contained about one pint of bloody serum. Heart filled with blood clots, and several long thrombi of white organized fibrin, which extended some distance down into the aorta. Pleural cavity highly congested, and contained about six ounces of effused serum. Stomach congested. Large intestines congested, and very much thickened and partly filled with masses of jelly-like mucus and fermenting food. Other organs comparatively healthy. Blood and contents of the bowels contain the same kind of yeast vegetations found in the previously described cases. Immediate cause of death, thrombi in heart and emboli in lungs.

Case 14.—Died since 12 M. to-day. Flesh still warm. Had chronic diarrhea about three weeks before the "trip-hammer" pulsations of heart began yesterday. Surface very blue: blood very black. Brain gorged with black clotted blood. Pleural cavity contained one pint of bloody serum. Right lung gorged with black, clotted blood, and softened so that it fell to pieces in handling. Left lung recently involved, and gorged with blood. Small tubercles scattered throughout the lungs. Heat normal, except a long mass of fibrin extending through it, and some inches down the aorta. Liver gorged with black clotted blood, and gall bladder contained bloody bile. Stomach congested, and filled with yellow rice-water matter with mucus. Large bowels thickened and congested. Digestive canal filled with yeast vegetations of acid and alcoholic types, and blood contained numerous masses of mycodermia aceti. Deaths caused by embolism of brain, lungs and liver.

Case 15.—November, 16. Died last night. Weight, 150 pounds. Surface blue. Brain and membranes slightly congested. No effusion. Lungs gorged with black, clotted blood, resulting in about two ounces of effused serum. Heart filled

with tough clots. Kidneys highly congested and pelvis and ureters filled with clotted blood. Ovaries filled with clotted blood. Liver normal. Stomach and intestines congested; lower bowels thickened and filled with slimy mucus and fermenting food. Lungs contain a few small tubercles. Blood and contents of bowels contain the same kind of yeast vegetation as were found in previous cases. Immediate cause of

death, embolism in lungs, kidneys, and ovaries.

Case 17.—One hog died last night in poor condition from having suffered severely for over three weeks with chronic diarrhea. "Trip-hammer" pulsations began about eighteen hours before death. Surface blue; lungs gorged with black, clotted blood and contained many tubercles. Cavity of chest contained over one pint of effused bloody serum. Heart filled with blood clots and white ropes of organized fibrin, extending through the heart and eight or ten inches down the aorta. Pericardium contained about four ounces of clear serum. Stomach and large intestines thickened and congested, and partially filled with slimy, yellow matter mixed with with fermenting food. Other organs comparative healthy. Blood and contents of the bowels contained the same yeast vegetations as were found in the previous described cases. Immediate cause of death, thrombi in heart, and emboli in lungs.

Case 16.—Ten A. M. Died this morning at 8 o'clock; still warm. Had diarrhea for over two weeks before death. "Trip-hammer" pulsations, first noticed day before yesterday. Has been a more lingering case than usual. Weighed 200 pounds. Meninges and sinuses of the brain full of blood; slight exudation of serum. Kidneys gorged with blood and filled with clots. Uterus so gorged with black, clotted blood, that it ruptured, discharging several ounces of clotted blood into the abdomen. This appears to have been the immediate cause of death. Stomach and intestines gorged with clotted blood and gangrenous in spots. Heart contained a thrombus. Liver quite healthy. Surface of body not blue.

Lungs in fair condition, but slightly congested.

TRIP-HAMMER BEATS.

It will be seen that the "trip-hammer" beats are a pathognomonic sign of heart-clot, or cardiac thrombosis in swine, being the efforts of the heart to dislodge the abnormal bodies that seriously interfere with its functions—indeed, (to repeat) so seriously, as to cause rupture of the heart itself in vain efforts to free itself from its load. (Is not the heart automatic? See farther on.)

Now if it can be shown that healthy men live on vinegar in

excess in their diet until their hearts present the "trip-hammer" beats, it is evidence that thrombosis has been produced within the cavities of the human heart, as in the typical case alluded to in the outset, and tends to throw light on that entirely obscure case that occurred a quarter of a century ago.

[TO BE CONTINUED.]

Clinical Reports.

Anal Fissure and Eczema—Alum and Iron Mass—Dilatation—
"Mecca Oil"—My Own Case. By Dr. WILLIAM JOSEPH JONES,
Mushet, Va.

More than fifteen years ago, I had, at times, an intense pruritus ani. Frequently, after retiring at night, I would be kept awake several hours by the itching around the margin of the anus, and, during the night, I would often be aroused and find myself rubbing the parts. A laxative would, however, afford relief until I would again become constipated, when the same disagreeable itching would occur. Being engaged in a constant active practice in a section of country where much horseback riding was required, and obtaining relief from time to time, by means above mentioned, I neglected to make use of any curative remedies. At that time I resided in Amherst county, Va.

Twelve years ago I located at Waynesboro, Va The change from freestone to limestone water was, for a time, beneficial, and for several years I had but little trouble. During the summer of 1880, my practice being extensive and laborious, I was taken with acute dysentery. Not wishing to neglect my patients, I continued my practice, notwithstanding the dysentery. In a few days my dejections became exceedingly painful, and an intense itching was developed, which, together with a continuance of the dysentery, totally disabled me, and I was compelled to give up my practice. I had several physicians to see me. At that time there were a number of small cracks in and around the margin of the anus, but no large fissure. These cracks bled a little at each bowel evacuation, and kept up a continual itching. The physicians, who attended me, cauterized the cracks with nitrate of silver once every two or three

days, and had me to use warm baths, poultices, and a host of ointments. While this treatment was in progress, an eczema developed, which spread over the sacral region, the buttocks, and scrotum. My great suffering, and the consequent loss of sleep, reduced me to almost a state of help-lessness, and more than once I despaired of life. Early in the treatment, the dysentery was relieved by the usual remedies, and a point of great difficulty was to keep my fæces soft, so as to prevent, in some degree, the great pain when at stool. Hot poultices afforded the only relief.

My physicians were very kind and attentive, and exhausted their resources in trying to effect a cure. The nitrate of silver and ointments were, after a time, abandoned as being of no value, if not a disadvantage. For months I was confined to my room; but was able to change my position from the bed to the lounge and to the chair, keeping a poultice of flax-seed applied over the affected parts.

Finally in, I think, October, 1881, I submitted in writing my case to the Medical Society of Virginia, then in session in Danville. Dr. J. A. Alexander (who has recently died at Citra, Fla.,) kindly presented my statement, and brought back to me the advice of Drs. Hunter McGuire and Alban S. Payne. Dr. McGuire advised the internal use of iodide of mercury, as an alterative; and Dr. Payne, Carlsbad salts, with the addition of a little pure sulphur. The mercury did not agree with my stomach. The salts and sulphur I used for a considerable time, and may have benefitted me some, but the improvement was very slow.

After awhile, as sick people will do, physicians as well as others, I began to prescribe for myself. Not being able, financially, to attend the Springs, I procured the mass from the Bedford Alum and Iron, dissolved it in pure water, and used no other for drinking purposes. I also carbolized a portion of this solution, and used it for bathing the parts. The use of this water kept my bowels soft and regular, and the carbolized bath, frequently repeated, allayed the itching to such a degree that I was enabled to sleep. My appetite and digestion were also greatly improved. From the commencement of the use of this remedy I date my improvement. The external eczema gradually healed, and I was restored to my usual general good health. The process of recovery was, however, long and tedious. During an interval of five years, I was unable to do any horse-back riding. Perhaps my fears of a return of the eczema deterred me from the saddle longer than actually necessary.

However, after the expiration of about five years, I resumed practice. But a slight itching about the anus continued so, that I was careful to use carbolized warm water injections at every evacuation, when circumstances did not prevent; and, by so doing, I got along in comparative comfort, until

the latter part of last September.

At this time I had two cases of labor on hand, both of them tedious; and one proved to be a case of twins, with two placentæ, both adherent. Being concerned about the women, I forgot my own case, and restrained my natural inclination until my accumulated fæces became dry and hard. The result was a forced dejection, with hard straining, which split the mucous membrane over the external sphincter into many cracks, perhaps more than a dozen. The same old eczema rapidly developed, extending over the scrotum and the sacro-ischiatic region. My suffering was so great that sleep was impossible, even under the influence of morphia, and tears involuntarily flowed down my cheeks.

I had Dr. A. C. Fox, of Waynesboro, called, and after consulting with him, the conclusion was reached that forcible dilatation of the sphincters was perhaps the quickest and only prospect of relief. After a proper preparation, having emptied the bowels by means of Epsom salts and warm water injections, the doctor gave me a hypodermic of morphia, $\frac{1}{4}$ gr., with atropine, $\frac{1}{120}$ gr. (I am very susceptible to opiates). He then applied an 8 per cent. solution of cocaine and dilated. I had a hot flax-seed poultice applied immediately afterwards, and frequently changed. In about eight hours the pain from the dilatation was relieved, I fell asleep, and awoke the next morning very much better. After three or four days, a second dilatation was found to be necessary. In two weeks I was well enough to resume my practice.

I ought to state just here, that while confined to bed, about ten days, I lived on beef essence freshly prepared, and emptied my bowels about every three days by means of hot

water injections.

After the first dilatation, the eczema rapidly disappeared, proving that it was dependent on, and excited by the cracks about the anus. The inflamed condition of the cracks also disappeared with the eczema, and some of them healed, but others did not. Therefore, the second dilatation was found to be necessary. After relief had come, and there seemed to be sufficient dilatation, still there remained a considerable

fissure in the middle line up the posterior margin of the anus, which, I think, extended as far as, and perhaps through the width of, the internal sphincter; and also several very small cracks on the sides of the anus, just within the margin. These gave me considerable pain at the times that my bowels moved, although I used hot water injections every time, and kept my bowels soft by taking, night and morning, one pill lapacticus (Sharp & Dohme). The remaining fissures I have treated as follows:

R.—Fld. ext. pinus canadensis (white).....f 3j. Sulph. atropia.....gr. iv. M. S.: One drop in each fissure after each dejection.

The above prescription I used about six weeks, and experienced great relief; but the fissure would not heal. I then substituted the following:

Re.—Sulph. atropia.....gr. iv. Sulph. morpia.....gr. iv. Chloral hydrat.....gr ij. Aq......f5j.

M. S.: One drop in each fissure after each dejection.

The last prescription I used about two weeks; result, fissures all healed. I found, however, that the mucous membrane about the anus was dry, and disposed to crack when subjected to the least strain, and very minute cracks would occasionally occur, which would quickly heal by applying:

Ry.—Fld. ext. hydrastis (white) } equal parts—Mix.

Whilst application of the above, after movements from the bowels, would relieve the smarting and heal the minute cracks, the dryness still continued.

A gentleman casually remarked in my presence, that "Mecca oil," a natural oil produced near Dayton, Ohio, the only oil of this kind in the world, was the best remedy he had ever tried for chapped hands. Acting upon this suggestion, I procured some of the oil. I am at this time physician to the "American Manganese Company, Limited," and the men, who mine the ore, are greatly troubled with chapped hands. I first prescribed the oil for the men. They uniformly reported that it was the best remedy they had ever had; that it healed the chaps quickly, and made the skin soft and pliable.

With this experience, I commenced the use of it, by applying a little after my bowels moved, and I have found that it relieves the aforementioned dryness, and I am not troubled with any more cracks. Where the posterior fissure was, however, remains a little tender, and, in consequence, the sphincter does not readily relax. Would any of the profession advise a third dilatation?

Gorrespondence.

PARIS LETTER.

Monument to Duchenne—Why not erect Monuments to American Doctors?—Etiology of Pneumonia—Its Contagiousness Discussed—Is it a Specific Fever?—Microbe of Diphtheria Isolated.—Treatment of Sore Throat of Convalescence from Measles and Scarlatina—Scarlatination Suggested in 1851.—Artificial Human Fecundation—The "Son of a Squirt," or Some other Man.—Microbe of Malaria Discovered.—Antipyrine for Labor Pains—Its Combination with Cocaine for Hypodermic Use—It Use in sDiabetes and Exophthalmic Goitre.

Paris, February 15th 1889.

To the Editor of the Virginia Medical Monthly:

Dear Sir,—The necessary funds have been subscribed for the erection of a monument to the memory of the late Dr. Duchenne, of Boulogne. This is most creditable to the profession of France, for though he was only a provincial physician and enjoyed the most meagre facilities for clinical investigation, he solved some of the most difficult problems in neuro-pathology, and enlarged and enriched that special field of labor until it became the terra illustrissima of medical science.

This monument is to take the form of a life-sized statue of Dr. Duchenne, and to occupy a conspicuous position in the enceinte of the hospital Salpétrière—an especially appro-

priate locality, inasmuch as it has been in the wards of that institution that the truth of his teachings has received its amplest vindication, and that the most ardent of his deciples, Professor Charcot, has achieved those triumphs for science and humanity which have rendered his name illustrious throughout the world.

Why should not the American profession learn a lesson from this example, and perpetuate in brass or marble the memories of such of its members as have honored their calling, and proved themselves worthy of homage? Why should Gross and Flint, and Stone and Otis, and Gaillard. and Wellford, and other great American physicians and surgeons, be permitted to sleep in forgotten graves by those to whom they have bequeathed the rich legacy of their services and their triumphs? Does the fact that they have left behind them names which will live while the history of Medicine is read, release us from the obligation to manifest our appreciation of their labors and achievements? For one, I think not, and I hope, and believe, that the day will come when the enceinte of American Hospitals will be adorned by the statue of some one of those great American physicians who have helped to secure for American Medicine the position which it is destined to occupy—the foremost place in the vanguard of advancing science.

M. Netter, the well known bacteriologist, has recently promulgated some very original and peculiar ideas respecting the *etiology of pneumonia*, which may be stated in this wise:

1st. It has its characteristic bacilli which play the principal rôle in its genesis and perpetuation, and specially infest the saliva, wherein they find the condition, essential to their existence and to their fecundation. The tendency to repetition which the disease manifests, even for several years after its primary invasion of the system, is attributable to this fact—i. e., to the presence of an infected and infecting salivary secretion.

2d. It is essentially both a contagious and an infectious disease, and bed linen, wearing apparel, and, in fact, every material object brought in contact with it, become a means of its dissemination, just as in the eruptive fevers. Hence

it is that, when one member of a family is attacked, the other members acquire a susceptibility to it, and scarcely ever escape it.

In view of the alleged facts respecting the etiology of pneumonia, Netter proceeds to give the following directions for the guidance of those who are brought into professional relations with it: 1st. Segregate immediately all patients affected with pneumonia, taking special care that they are not brought in contact with persons suffering from typhoid fever, nephritis, diabetes, rubeola, and acute inflammations of the air passages, since in such diseases there is an abnormal tendency to the development of pulmonary complications: 2d, exclude as far as possible relations and friends from their chambers, and absolutely prohibit such persons from passing a night at their bedside, and from occupying the same bed with them: 3d, destroy, or thoroughly disinfect, their bed linen, wearing apparel, all vessels which have been used by the sick, and indeed, every material object with which they have been brought in contact; and 4th, remove and destroy the sputum so soon as it is expectorated.

It is little singular, however, that he should have neglected to give any direction for the destruction of the microbes alleged to exist in the saliva, for, if his teachings in that regard are correct, some measure of that kind must necessarily be the most imperative indication in the prophylaxis of pneumonia.

As you know, Krebs long since discovered certain organisms in the bodies of persons who had died of pneumonia, which he regarded as the characteristic bacilli of that disease, and the essential agents in its development; and that, from that time forward, the profession has been divided into two antagonistic camps upon the question of their real rôle as morbific agents—the French school being especially hostile to the views advanced by the German pathologist.

Although the existence of these microbes cannot be denied, it has been demonstrated that they are neither peculiar to pneumonia, nor necessarily noxious to the human system; or in other words, that they are found in connec-

tion with other diseases, and sometimes where no disease exists.

The crucial test of all pathological doctrine must necessarily be intelligent professional experience. Nothing can stand *en permanence* unless it be sanctioned by fact—by confirmatory evidence eliminated by clinical study and observation. What, therefore, becomes of Netter's etiological discoveries when thus weighed and measured?

Jaccoud, the most able and reliable of contemporaneous pathologists, after an exhaustive examination of the question of contagiousness of pneumonia, states in substance that, although there have undoubtedly been instances in which it was propagated by contagion, they are comparatively few in number; and that they are still further to be reduced by eliminating the cases in which the disease communicated was in reality a contagious catarrh, in which pulmonary inflammation manifested itself as an accidental and non-essential complication.

Until the absolute contagiousness of pneumonia is demonstrated, the question of its infectiousness has no locus standi—is necessarily irrelevant; and yet, I can but ask you, and every reader of your journal, if a case has ever been encountered in which even a suspicion of its development through the instrumentality of bed linen, wearing apparel, or any other material agent was admissible?

That one attack of pneumonia predisposes to another attack has long been recognized as an established fact in medicine. Thus Grisole reports the recurrence of eight attacks in the same individual; Chomel of ten; Andral of sixteen; and Rush of twenty-eight, while Wiel, that out of a total of twenty-eight children treated for this disease, there were thirty-one relapses.

Netter, as before stated, explains this fact upon the theory that the characteristic microbe of pneumonia, finding in the saliva the conditions essential to its existence and fecundation, selects the secretion as its permanent *habitat*, and thereby renders it a source of infection to the system.

That the explanation is fallacious, is made evident by the following considerations, viz: 1st. If these microbes exist

and multiply in the saliva in the manner insisted upon, we would not have to do with recurrences of the disease but with its continued existence, inasmuch as this secretion manifests no appreciable variations either in its physical or chemical constituents, and therefore continuously furnishes the conditions precedent to the proliferation of the infecting bacilli: 2d. If the saliva were the fons et origo of these attacks of pneumonia, the chewing of tobacco—a most potent anti-germicide—would secure an immunity from them; and, considering the great number of persons who are addicted to this habit in certain localities—especially in Old Virginia -this exemption could not have passed unnoticed. As no such fact had been noted, it is conclusive that it does not exist, and hence, the theory of Netter which would necessitate it, is untenable; and 3d. If M. Netter's theory be correct, it ipso facto excludes all other explanations of the pneumonia in question, whereas there is an explanation entirely different in its character, which is at once reasonable. complete, and conclusive.

Charcot, though the greatest of neuro-pathologists, has studied this special question with his characteristic zeal and ability, and it is to him that we are indebted for the explanation to which I refer. According to him, an attack of pneumonia develops organic changes in the pulmonary tissues of so radical a nature as to render them less capable of maintaining their normal integrity when morbific influences are brought to bear upon them. The status quo is never thoroughly re-established in them, and they are consequently left in a condition of greater susceptibility to another attack of the disease. Their vitality, together with the vis medicatrix natura with which they were originally endowed, diminishes under the tension of the local and general disturbances to which they are subjected, and they become more vulnerable, and less capable of resistance when again assailed, whether it be by an agent acting directly upon them, or indirectly affecting them through the general system. Hence it is that one attack of pneumonia prepares the way, and really invites, another attack, without the intervention of an infected and infecting saliva, Monsier Netter's dictum to the contrary notwithstanding.

In view of these considerations, and of various others which might be mentioned, if space permitted, I cannot believe that the views enunciated by M. Netter are destined to produce any profound or enduring impression upon the profession either here or elsewhere. His is a case of "microbe upon the brain," pure and simple; and yet, it may prove of benefit to medicine by leading to a more thorough study of the etiology of pneumonia, and, perhaps, to the settlement of the long mooted question as to whether it is essentially a pulmonary inflammation with systematic complications, or a specific fever, of which the local symptoms are only the accidents and concomitants. Contrary to the teachings of the schools, I am inclined to think with Conheim, Hoffman, Huxham and others, that the latter view is, after all, the correct one; and to believe that the time is not far distant when, under the influence of a more intelligent and diligent investigation, a revolution of professional sentiment will occur in regard to this interesting and important matter.

It is claimed that M. Roux, one of Pasteur's assistants, in connection with M. Vesica, has isolated the microbe of diphtheria, and has farther succeeded in reproducing the disease in rabbits and guinea-pigs by its agency. They expect soon to be able to inoculate the human system with it in such a way as to secure protection against that most terrible of maladies. M. Roux contends that this microbe only develops in the mucous membrane already diseased, which doubtless accounts for the fact that diphtheria frequently appears while patients are recovering from measles and scarlet fever, and shows the importance of a careful surveillance of the throat under such circumstances.

A sore throat occurring during convalescence from these and other kindred maladies, should be treated by carbolized water in the form of spray or gargles, while the muriated tincture of iron, with quinine or salicylic acid on alternate days, should be freely administered.

Apropos of securing protection against diphtheria by inoculation, I will state as a matter of history that the thesis presented by me to the Faculty of the Jefferson Medical College, on the occasion of my graduation, in 1851, was entitled "scarlatination," and was devoted to the discussion of the feasibility of protecting the human system against scarlatina by a process of repeated vaccinations. Sic vos non vobis.

Considerable excitement prevails here in medical circles respecting the subject of artificial human fecundation. You will remember the experiments in this regard which were made a few years since by a noted American specialist, and how much they amazed the profession—especially the English portion of it. Nevertheless, the matter has been revived here, and some of the most serious of the Paris faculty have gone largely into it, and with considerable success, at least pecuniarily. Indeed, women desirous of progeny are flocking to Paris from all quarters of the globe, to have the syringe accomplish that which nature has rendered otherwise impossible. How the child of this unnatural and doubtful paternity will relish the reflection that he is in reality a "son of a squirt" remains for the future to disclose; but. in the meantime, women are made happy, and the doctors grow rich accordingly. Vive la blaque?

I never see a reference to this mode of procreation without recalling a story which circulated in my section of North Carolina when I was a boy. A couple, whose desire for progeny had not been realized after several years of faithful labor and anxious expectancy, visited the Virginia White Sulphur Springs under medical advice, with the result of a consummation of their wishes and the birth of a fine red-headed baby, some months afterwards. Unfortunately, the child only lived a few years, when the twain concluded to make another pilgrimage to the Springs, with the hope of repetition of their previous fortunate experience. The father, therefore, called up Jim, the coachman, one evening, and, taking him into his confidence, told him to have the carriage ready for an early start on the following morning-for every one went to the Springs in their own conveyances in those days. "Yes, Massa, I'll have her ready to-morrow mornin," Jim answered; and then added, seemingly on reflection, "But if you and Missus is a gwine

arter an nudder baby, taint no use." "Why so, Jim?" "What do you mean?" was the master's surprised inquiry. "Why, you see Massa, I hearn tell dat de young red-headed clerk dat used to be a flying aroun, Missus when we was dar befo, is been dead dis goin, on two year," was Jim's solemn response. It is hardly necessary to say that they remained at home that year, and never discussed the subject of an heir afterwards. Subterfuges and substitutions are so easily of accomplishment in this connection, that, in my judgment, it is far better for science to stand aside, and let nature take her own course, whatever may be the views of ambitious husbands and disappointed wives in regard to the matter.

At a recent séance of the Academy of Sciences, Professor Buchard, read a paper prepared by Dr. Laveran, of Val de Grace, in which its author claims to have discovered the characteristic microbe of malaria. He states that this microbe has been found associated with paludinism wherever that condition has been discovered, as, for instance, in France, Italy, Russia, Algiers, Egypt, America and Madagascar. In view of this and other facts, Professor Buchard announced his conviction that the long-sought for explanation of the action of marsh miasm upon the human organism has really been discovered, and the problem of malarial infection definitely solved.

Dr. Laveran first claimed to have made the discovery in 1879, and yet the compilers of the Dictionaire de Médicine et de Chirurgie—the supreme authority in France—which was published in 1883, used the following language in regard to this subject: "We must candidly admit, however, that though the microbe theory of the causation of paludinism is very plausible and attractive, the testimony adduced in its favor up to the present moment is not sufficient to justify its acceptance as the true explanation of the action of malaria upon the organism." When doctors disagree, who shall decide?

Antipyrine seemingly approximates to the rôle of a panacea in therapeutics. Each day seems to bring forth a new indication which it fulfills. M. Fauchon, of Orleans,

reports that in two instances, he has relieved the pains of parturition without diminishing the vigor of uterine contraction by the subcutaneous injection of 15 centi-grammes or

antipyrin.

As a means of preventing local pain by the hypodermic injection of antipyrin, he combined cocaine with it, using a solution made in this wise, viz.: antipyrin, 2 grammes, chlorohydrate of cocaine, 4 centi-grammes, distilled water, 4 grammes. So much pain is experienced ordinarily from a hypodermic injection that it is difficult to persuade patients to permit a second one. The addition of cocaine does not preclude several moments of intense suffering, and I have found that the better plan is first to introduce the cocaine and when its characteristic local anæsthesia has been induced, to inject the antipyrine.

Huchard, has likewise used antipyrine with marked benefit in diabetes and exophthalmic goitre, and he believes that it will prove equally efficacious in all the neuroses of bulbular origin. In order to secure the full measure of its potency in the prevention of the conversion of glycogen into glucose through the instrumentality of the liver and the muscles, the drug should be administered in heroic doses, from three to six grammes daily, and for a consider-

able period.

While thus covering so large a therapeutical field, and manifesting such unquestionable activity as a remedy, antipyrine is comparatively innocuous to the human system. Its mission seems to be to heal without the infliction of any commensurate wound in accomplishing that result; it is essentially remedial, and not toxic in its effects upon the organism, and its discovery cannot be regarded otherwise than as one of the greatest boons to humanity, as well as one of the most important advances in medicine which the history of the age has chronicled. Au revoir.

Yours very truly and respectfully,

EDWARD WARREN-BEY, M. D., C. M., LL. D.,

15 Rue Caumartin.

Dr. Edward Warren-Bey.

Mr. Editor: - I have been especially pleased at finding that Dr. Edward Warren-Bey, of Paris, has become one of your regular foreign correspondents. I was one of his private "quiz-class" in Baltimore, during the winter of 1868-9, and attended his lectures during the same season while he was Professor of Surgery in the Washington University of Baltimore. He was an accomplished and admirable teacher and one of the kindest and most genial of men. I was always an admirer of him, and he was beloved by all of his students, who always found him their friend. Genius was written on his brow, and eloquence flowed from his lips, and it was impossible to hear him without realizing the presence of a man upon whom nature had lavished her choicest gifts. As a North Carolinian, we are proud of his career, and would be glad if some position commensurate with his great ability could be offered him to return to the land of his birth, and spend the remainder of his days with the friends of his youth and young man's life.

I have just re-read his work entitled, "A Doctor's Experience on Three Continents;" and being an actor in some of the scenes he so vividly describes, I find it of especial interest. This book should undoubtedly have a large circulation, and I hope for a second edition.

I say this much for my beloved Professor, that he may know that he is kindly remembered by his many admirers in his native State. While defamers and detractors may assail him, Dr. Warren will be remembered and honored long after all such have gone "to the vile dust from whence they sprung, unwept, unhonored, and unsung."

G. E. MATTHEWS, M. D.,

Ringwood, N. C., Feb. 25th, 1889.

Have prescribed Tongaline frequently for the complaints for which it is recommended, and have found it very reliable in its action.—J. W. Vance, M. D., St. Joseph, Mo.

Medical Examining Board of Virginia and the Philadelphia "Medical Times."

CHARLOTTESVILLE, VA., March 6th, 1889.

Editor Virginia Medical Monthly:

The Medical Examining Board of this State at one of its sessions, by a resolution, instructed its Secretary to publish the proceedings of the sessions of the Board in some medical journal in the State; and I, then the Secretary, selected the *Virginia Medical Monthly* as the one in which to publish the said records, and believe they have regularly appeared in the periodical which you manage in, to say the least of it, a very creditable style.

The report of the proceedings of the Spring Session of the Medical Examining Board of Virginia for the year 1888, though occupying thirty-six pages of your journal, you very kindly published, and the Board ordered several hundred "reprints" of these proceedings—of course paying the printers for them.

These "reprints" have been widely circulated all over this country, showing fully the work done by the Medical Examining Board of Virginia up to April 20, 1888.

On page 30 of the "reprint," there is a tabular statement of the entire work of the Board for the three and a halt years of its existence; and this statement shows the true standing of the medical schools therein mentioned, as determined by the proficiency shown by their respective graduates when put to the test of a fair examination.

The table referred to is a plain one, and embodies, under seven heads, the results of the examinations made by the Board. Heading No. 1 shows the number of applicants from each school mentioned—the total; and, of course, embodies all who appeared asking for license, whether they had applied before or not. The second head embraces the number of applicants from each school rejected by the Board, and if an applicant applied twice and was rejected on both examinations, he is counted as if he had been two separate individuals. The third column shows the total number of

licenses granted, whether on first or second examination. The fourth, the number of applicants from each rejected and applying a second time. The fifth, the number of applicants a second time rejected. The sixth, certificates issued on second examinations, embodied, of course, in the third column. And the seventh, the number of applicants who had applied, but had not completed their examination.

Now, if the system of instruction at all the medical schools was equal in thoroughness, and the examinations for degree as much a test at one school as at another, it stands to reason that the percentage of rejections would be the same for each school. Unfortunately for some of the schools, however, the percentage of rejections is much greater in them than in others, and here is where the shoe pinches.

We do not wish to enter into controversy; but since the "reprint" referred to has been found fault with and considered as untrue, we hope you will, at least, allow us to vindicate the vile aspersions with which a would-be first-class medical journal—the Philadelphia Medical Times—has attempted to calumniate the Medical Examining Board of Virginia.

We do not deem it necessary to reproduce the entire article, save on the ground that it is so full of misstatements. that were we to take them one at a time, we should be obliged to transcribe the whole article in piecemeal; so we give it entire:

1. "We are sorry to be compelled to call attention to this matter, but the Virginia Examining Board has, by its very peculiar method of registering applicants for examination, been instrumental in spreading an untrue report concerning the Medico-Chirurgical College of Philadelphia; and, although its attention has been repeatedly called to the matter, the Board has not rectified it.

2. In the report of this Board it is stated that there were three candidates from the college in question—all of whom failed, and two of them failed at their second trial. On inquiry, it turns out that there has been but one candidate before the Board, who has made three attempts and failed

each time.

3. Starting with the supposition that this Board has no special reason to be inimical to the college in question, we would like to know why the registry is made in such a manner as to give the impression that three candidates were rejected. Many journals have commented on this case, and every one has understood that there were three candidates. The Board should make its reports in such a

manner as to be intelligible.

4. Supposing the Board to be impartial, why has it not registered the candidates from all colleges in the same manner? If one man examined three times is registered as three first failures and two second failures, how does it happen that in other cases we see records of one first failure and one second failure credited to the same college? registry was made as it was with the Medico-Chirurgical College, it should read two first failures and one second failure.

5. Having thus published a record which, as every one reads it, is literally untrue, without a word of explanation to prevent the injustice which such a report was bound to do the college; having registered this college's candidate in a way to make the worst possible showing for it, and used a different method for other colleges, the Board was in honor bound to correct the slander it had put into circulation. This, however, it has not done. We know of no reason which should make the Virginia Board hostile to this College; but this method of operating looks more like the trickery of an unscrupulous enemy than the work of an honest and impartial judge. The only explanation we can give is that the Board has been manipulated by parties who are hostile to this College. Such things are not calculated to greatly elevate the standard of medical education."

From the leading paragraph it is evident that the animus of the piece was inspired by the Medico-Chirurgical College, of Philadelphia; or, perhaps, written by the clerk of its faculty. Furthermore, we do not remember that any official communication has ever been sent us from the Times office, though we have a faint recollection of seeing some sample copies of that journal, which, after perusal, we did not think compared favorably with the three other Philadelphia journals, which are to be found on the table of our private office. If any of these "specimen copies" were intended to call our attention to the shortcomings of the Medical Examining Board of Virginia, we failed to note the articles.

In the second paragraph (the numbering is our own) the wail is due to the one candidate, who applied three times, being placed in the first column of our official report. This poor unfortunate young man was so illy taught, that the Board could not cover up the poor teaching of his Alma Mater, and as he applied three times to the Board for a license, and was rejected each time, the Board statistics simply show that three examinations, each representing a diploma of the Medico-Chirurgical College, of Philadelphia, had been made.

Paragraph three says: "The Board should make its reports in such a manner as to be intelligible." But what is the use of making reports for any persons who cannot read, as any one will see by reading the fourth paragraph and comparing it with any of the official reports of the Board. There are only two of these reports embracing tabular statements—the "Reprint" and the report contained in the Virginia Medical Monthly for November, 1888.

In paragraph fourth, the *Times* says: "Why has it not registered the candidates from all colleges in the same manner?" We reply, and will prove it, that the Board has done so, and the fault is in the disability of the editor of the *Times* to read and understand the plainest figures in daily use by all English speaking and reading people.

We quote: "If one man examined three times is registered as three first failures and two second failures, how does it happen that in other cases we see records of one first failure and one second failure credited to the same college?" We reply that neither the editor of the Times, nor of any one of the many commenting journals, saw any such thing either in the "Reprint," or in the tabular statement in the November number of the Monthly for 1888. The fault is, these very shrewd observers did not keep their eyes on the correct columns of the "Report." There is only one college charged with one second failure in the "Reprint," and there

are eight, and not one, first failures charged to the same college. In the only other official tabular statement, there are two colleges charged with one second failure each, respectively showing nine and two first failures. This, too, is exactly what paragraph four of the Times' article says would be correct.

Now, what can this *Philadelphia Medical Times* think of itself? If the editor of this journal has one speck of manliness about him he will endeavor to correct the impression he has endeavored to create to the detriment of the Medical Examining Board of Virginia.

The fifth paragraph is so ill-timed, unmanly and untrue,

that we pass it by.

But we have been surprised to find that Dr. John H. Rauch, of the Illinois State Board of Health, has caught on to the spirit of these antagonists of the Medical Examining Board of Virginia. We have a profound respect and esteem for Dr. Rauch, and regret very much that he should have altered a report which we made and sent him after a good deal of labor done for him as a personal favor.

He only altered the report, too, in case of the Medico-Chirurgical College of Philadelphia, and left the other seven colleges charged in our report with "Rejected Applicants from Each applying Second Time," as he found them. We had no objection to his changing our report to conform to his own ideas, but we do think he should have done the same for all the other colleges coming in the same category. But we have no doubt Dr. Rauch will correct this as soon as his attention is called thereto.

Hoping that you will publish this letter for the benefit of the *Philadelphia Medical Times*, and of the *Medico-Chirurgi*cal College of Philadelphia, which we suppose gives the *Times* a full-page advertisement,

We remain, with great respect,

HUGH T. NELSON, M. D.,

President Medical Examining Board of Virginia.

Griginal Translations.

From the German. By M. D. HOGE, Jr., M. D., Richmond, Va.

Irrigation of the Rectum.

Instead of the hard and sharp points usually furnished with syringes for the purposes of giving clysters and washing out the lower bowel, Prof. Quincke, of Kiel, (Rundschau, 12. H. 1888), has used for years with much satisfaction a tube of soft rubber, about twelve inches long with a diameter about one-quarter of an inch; for children one smaller in proportion. Near the more solid end of introduction are two holes on each side; the opposite end is slightly funnelshaped, similar to an esophagus tube, only smaller. The introduction of such a tube, well oiled, offers no difficulty whatever, and is incapable of causing any injury to the mucous membrane, and is readily cleaned with soap and water. In tympanites, Quincke has left the tube in the rectum for several hours at a time without any difficulty. If the sphincter should for any reason be paralized or incapable of performing its proper function, a small rubber balloon can be introduced alongside of the tube and inflated which would prevent any fluid from flowing away too soon. Probably moderate strictures could be overcome, and the hard fæcal balls softened in this way without difficulty or danger.

Method of Embalming.

Dr. Lawfew recommends the following solution as an excellent one for embalming purposes:

The quantity for a grown person is about ten pints.

The fluid is injected, either by means of a strong syringe or pump, into the common carotid, the crural, or the brachial artery. It is best to make the first few injections in rapid succession, and the last after a pause of fitteen or twenty minutes, until the entire body is thoroughly saturated with the solution, which can be detected by a small prick in the finger or toe. If the fluid is colored by aniline red, the skin and especially the face assumes a very natural color.

Curative Effect of Erysipelas on Certain Diseases.

Fehleiren, after he had discovered the germ of erysipelas, was induced to experiment with it on various forms of malignant tumors; and now in this same line of research, Schwimmer (Rundschau, 13. H. 1888) gives some additional interesting results. As is known, erysipelas is caused by the streptococcus erysipelas which penetrates the lymphatics of the skin and mucous membranes. Since the coccus produces not only a dermatitis, but constitutional symptoms (fever, etc.) as well, it is probable that certain vegetative growths are influenced either for better or worse. many cases recorded in which ulcers, gonites purulenta, epithelioma of the face, sarcoma of the mouth and nose, etc., complicated by erysipelas have been brought to a standstill or cured. Schwimmer has noticed that syphilitic gumma and skin eruptions have entirely disappeared, when the patient suffered at the same time from erysipelas. However, he does not maintain that syphilis has been cured by this means. In non-syphilitic processes, such as lupus, psoriasis, lymphoma, keloid, etc., the effect has been either indifferent or sometimes favorable. Pneumonia, peritonitis and typhoid fever may also modify syphilis to a great extent. In a case of bilateral chronic orchitis and epididymitis which had resisted every form of treatment for two months, the patient was attacked by erysipelas which lasted ten days, was followed by a prompt recovery of the previous trouble. In seven cases of lupus it was without effect, but had a favorable influence on keloid.

In order to explain its curative action, Schwimmer says it is either due to the high fever, or the specific function of the micrococcus. Schwimmer recommends erysipelas inoculation in destructive processes, such as carcinoma and sarcoma—only then, however, when other curative measures have failed and the patient is not too much exhausted to stand the severe effects of a high fever.

Use of Pressure on Nerves.

Pressure on the nerves for its therapeutic effect has not received the attention which it deserves. Ling and others who practice the Swedish movement-cure have had good results from this means in several cases of trembling and cramps of the hands and fingers.

Dr. Anders Wide, of Stockholm, (Nordisk. Med. Arkiv. 1887, 10), was consulted by a young woman who suffered from tremor of supinator and pronator muscles of the forearm, in whom the hand made about two-hundred vibrations

in a minute. Pressure was made first, with the finger, on the median and radial nerves, then gradually the length of pressure was increased to eight hours by means of a tournequet, which method of treatment led to complete recovery in eleven days. In a case of paresis and atrophy of the forearm, resulting from a luxation of the thumb, and when electricity, massage and gymnastics had been tried in vain, pressure of the radial nerve led to a speedy recovery. Wide had good results in a case of incontinence of the bladder from constant pressure on the plexus hypogastrici inferior.—(Rundschau, 13. H. 1888.)

Salt in Skin Diseases.

Piffard recommends a five to twenty-five per cent. salt bath for various skin diseases. He says that a five per cent. solution cleanses and deodorizes the skin much more thoroughly than soap. The skin becomes soft and smoothe when the temperature is high (65°—80°), and used for fifteen or twenty minutes. The writer has used a five per cent. solution, with good results, in subacute eczema, psoriasis, furunculosis, scrofulosis and ulcerative syphilides.—(Rundschau, 13. H. 1888.)

Erysipelas.

In order to ascertain the influence of treatment or no treatment on cutting short an attack of erysipelas, Polotebnow (Rundschau, 13. H. 1888), made long series of experiments on sixty patients, treating them alternately as they arrived in the hospital by Volkmann's method of nitrate of silver solution painted over the affected parts, and only cold water compresses. He came to the conclusion that the results were about equal in both sets of cases, and considers the nitrate of silver solution very painful and unnecessary. In three cases there was no fever, and in a few others the temperature sank below the normal, while the erysipelas lasted two or three days longer. On the other hand, some cases presented the peculiar feature that the fever lasted from two to fourteen days after the erysipelas disappeared, and without any cause apparently.

Papine.

Dr. Charles H. Merz, house physician to University Hospital at Cleveland, Ohio, April 25th, 1887, says he has made use of Papine for some time past, both in hospital and private practice, and finds it a most agreeable substitute for morphine and opium. It is the anodyne par excellence.

Proceedings of Societies, Boards, etq.

QUARANTINE CONFERENCE.

First Day—Morning—March 5th, 1889.—The Quarantine Conference assembled in Montgomery, Alabama, at 10 A. M. Tuesday, March 5th, 1889. Dr. John H. Rauch, of Springfield, Ill., was elected temporary President, and Dr. E. J. Conyington, of Decatur, Ala., Secretary. Drs. P. Thompson, of Henderson, Ky., Richard P. Daniel, of Jacksonville, Fla., Thomas F. Wood, of Wilmington, N. C., J. D. Plunkett, of Nashville, Tenn., and Jerome Cochran, of Montgomery, Ala., were appointed the Committee on Credentials, Nomina-

tions, etc.

Dr. Cochran explained that the chief purpose of this Conference was to discuss the subject of quarantine in all of its bearings for the good of the people; but especially was the Conference to discuss the matter of quarantine so far as it relates to keeping yellow fever out of the Southern States, and suppressing the disease when the first cases of it occur in the cities. Unquestionably as much damage results to the interest of a community from a yellow fever panic, as from the primary disease. The medical profession should be educated on the subject of quarantine as much as on the diagnosis and treatment of diseases.

The Committee on Credentials, etc., reported the names of duly accredited representatives or members from Alabama, Florida, Georgia, Illinois, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, South Carolina, Tennessee, and Texas, U. S. Navy, and U. S. Marine Hospi-

tal Service.

The following officers were elected for this session: Dr. C. B. Wilkinson, of New Orleans, President; Hon. D. B. Hadden, of Tennessee, Dr. T. Grange Simons, of Charleston, S. C., Mr. E. Berkeley, of Georgia, Dr. William Bailey, of Louisville, Ky., Col. J. C. Clark, of Mobile, Ala., Dr. Robert Rutherford, of Texas, Dr. J. Y. Porter, of Key West, Fla., Dr. R. F. Gray, of Winston, N. C., Dr. B. M. Griffith, of Illinois, and Dr. J. M. Taylor, of Corinth, Miss., Vice-Presidents; Dr. J. A. McCormick, of Bowling Green, Ky., Secretary; Mr. J. L. Ludlow, of Winston, N. C., and J. B. Baird, of Atlanta, Ga., Assistant Secretaries.

Gov. Seay, delivered a brief, but cordial Address of Wel-

come.

Each speaker in discussion was allowed the floor only

ten minutes on any one subject.

Dr. D. M. Burgess, of Havana, Cuba, was unprepared to read his paper on "Maratine Quarantine," owing to the failure of arrival of his baggage.

During the Afternoon Session, Dr. G. B. Thornton, of Memphis, read the paper of Hon. J. C. Clarke, of Mobile, on

Railroad Ouarantines.

He said that experience has proven that yellow fever and other infections or contagious diseases can be kept out of the communities without resorting to absolute non-intercourse. The State Legislature should appropriate a reasonable sum for the protection of the State from these diseases. If put in the hands of the proper officials the sum need not be a large one. He suggested rules for the government of quarantines on railroads, and thought that rules and regulations for conducting quarantines should be made public, so that all parties may become informed as to the provisions. All quarantines should be under the general control of the State Boards of Health, so far as the quarantine relates to the States; but the general government should take in hand and enforce a maritine quarantine to prevent the introduction of an epidemic of infectious diseases into the country. All quarantine officers should be versed in medical science. He did not think it necessary to establish a non-intercourse quarantine, which, in its operation, would paralyze commerce.

Dr. Rutherford, of Texas, stated that in his State the system of inspecting trains by persons acting under police authority had been abandoned. The trains were now stopped at the quarantine stations and thoroughly inspected.

Mr. J. Voyle, of Gainesville, Fla., read a

History of the Epidemic of Yellow Fever in Gainesville, Fla., 1889.

He gave the results of his operations from the standpoint of a civil engineer, in which position he had seen and noted occurences in epidemics of the disease which caused him to arrive at certain deductions which he thought borne out by the incidents in the epidemic at Gainesville, Fla. One of the deductions was that there are recurrent epidemic waves, and that the periodic waves recur about every eleven or eleven and a half years, and the duration of this wave would be four years, and would traverse farther northward every year. Observation in the past led him to believe that

there would be an epidemic of yellow fever in this country in 1887; this conviction was realized in its appearance at Key West in 1887, and its travel northward in the next year reached Jacksonville and other points. This year, 1889, Mr. Voyle expects the disease to prevail in an epidemic form as far north as Savannah or Charleston. He then gave an outline of the outbreak and course of the disease at Gainesville during last summer. The cause of the disease is specific and foreign to our climate. It is practically to the general public invisible and intangible. Its transportation and multiplication are almost entirely confined to human beings or to fluid or moist matter.

During the *Night Session* the Committee on Business presented the report in a series of questions hoping thereby to secure profitable discussions, and called for them as follows:

(1.) What Form of Notification shall be Adopted in Case of Occurrence of Yellow Fever? To whom shall the First Notification be Sent?

Dr. Thompson said that a conference at Memphis, in 1878, formulated rules which ought to be adopted all around. Every healh officer should notify the State, and the local health officers. When a case of fever occurred at any one place every place in the State, or in the section ought to

know it as quick as lightning.

Dr. Thornton, said, members of Boards of Health now here, are already pledged, by the rules of quarantine conferences of 1879 and 1884, to notify each other whenever even a suspicious case occurs. Every health officer in the country and in Canada should be officially notified, for it was an international affair. Drs. Holt, of New Orleans, and Wirt Johnson, of Mississippi, had both given notice officially whenever cases of fever or suspicious cases had appeared in their fields and came to their notice. Official notice of occurrence of cases or suspicious cases ought to be sent to everybody interested. He was of the opinion that open, instead of cipher telegrams ought to be sent, and moved the adoption of the following:

Resolved, That this Convention urges upon all health authorities of States represented in it, the importance of strict compliance with the agreement of inter-state notification adopted by the National Conference of State Boards of Health, and the Sanitary Council of the Mississippi Valley, in regard to all communicable diseases, and especially in

regard to yellow fever.

Dr. Wilkinson opposed notifying any one except officers of health boards of occurrence of a case or suspicious case of any disease included in the resolution.

Dr. Simons moved that the United States Marine Hos-

pital Surgeon be included in the resolution. Carried.

(2.) Under What Circumstances should an Epidemic be Declared to Exist?.

Dr. Thompson said, that the universally adopted thought was that when a number of deaths occurred in any town from one disease, or a large number had been taken sick,

that was an epidemic.

Dr. Thornton had occasion to decide this question during the summer of 1878, when the fever appeared in Memphis. There was a considerable number of cases before he was inclined to believe it epidemic. He had never officially announced that yellow fever was epidemic until deaths from that disease were more than from all other diseases.

The question was, on motion of Dr. Rauch, laid on the

table.

(3.) Should we Advise the Depopulation of any Place on the Appearance of Yellow Fever; And if so, How Soon?

Dr. Thornton was opposed to depopulation.

Dr. Cochran would not advise depopulation in one case in a dozen. If a case appeared in a portion of a town he would advise the depopulation of the adjacent houses and districts, but he was opposed to depopulating whole towns and cities, for such a course resulted in panics and stampedes, and this Conference ought to rebuke this course severely. When the yellow fever overstepped all bounds it would be time to talk of depopulating towns, but he believed the fever could be kept in bounds and had no business ever getting out.

Dr. Wood thought the Conference ought to say distinctly when it was advisable for depopulation. He had no idea but that every physician would advise some patients to get

out in time of yellow fever.

Dr. Hyer said there need be no trouble about advertising a man to get out of a town in time of yellow fever, for when you go to tell him, he wouldn't be there unless all the wagons had gone before. The trouble was in getting the people to stay. Dr. Cochran said the time was coming when yellow fever would be so completely under the control of physicians that when a special house or district was affected, the people would not rebel.

Dr. Thornton moved to defer the question of depopula-

tion to the people of the towns interested.

Dr. Hoyle said depopulation had bankrupted Gainesville, Fla. The people ought to be educated to take care of themselves; then this question could be settled. He described all the terrors that existed there during the epidemic of last summer.

Dr. Sternberg said depopulation was one thing and a stampede another. The first thing to be done in an infected locality was to remove well people from infected districts so as to keep them from exposure. He thought the Conference ought to adopt the resolution that depopulation of infected acres by health officers was an important step in checking the progress of the disease, and made a motion to that effect.

Dr. Hamilton seconded Dr. Sternberg's motion, and gave the history of several cases of yellow fever in Baltimore in 1886, when the whole city was spared an epidemic by the depopulation of a block.

Dr. Cochran said that the following propositions covered

the question:

In the beginning of an outbreak of yellow fever there is no need of depopulation at all, except of infected houses or districts; but if people who are able desire to leave, they should do so quietly and deliberately; and those who leave healthy districts of the city, should go wherever they please without let or hindrance.

Persons living in infected houses or districts, should be encouraged to leave, but only under such restrictions as afford reasonable guarantee of safety to the communities in which they find asylum; and they should be sent only to

such communities as are willing to receive them.

In the depopulation of infected houses or districts, the inhabitants should be removed into camps on probation, or into vacant houses in the adjacent country. After five days detention if they remain well, and under proper regulations, such as disinfection of baggage, they should be considered free from danger, and allowed to go freely into any community willing to receive them.

The depopulation of large cities is altogether impracticable. The depopulation of sparsely settled towns and villa-

ges is altogether unnecessary, as in them it is always possi-

ble to prevent any general spread of the fever.

Refuge camps,—camps for the continued residence of people during the prevalence of epidemics—have heretofore been of very small value. One reason is, that it is never possible to induce any considerable portion of the population of an infected city to take refuge in them. Camps of probation, for temporary detention, may often be very useful.

Panics and stampedes are without excuse and excessively mischievious. At the beginning, yellow fever always spreads very slowly, and there is always time for everybody who desires to leave, to do so without hurry and under proper

regulations.

Dr. Weatherly thought Dr. Cochran was eminently right. Dr. Thompson said that Dr. Sternberg's resolution was a very good thing in theory, and was doubtless drawn under the impression that the health officers had powers to depopulate towns. If there was a place in the country where such power existed he had never heard of it. There was no power on earth to make a man get out of his own house when he did not want to. You could make him stay in, but when it came to making him get out, that was a different thing.

Dr. Seelye said the resolutions would be interpreted by Health Boards very undefinitely, and offered as a supplement to Dr. Sternberg's resolution the first proposition sub-

mitted by Dr. Cochran.

Dr. Sternberg accepted Dr. Seelye's substitute.

Dr. Bailey thought the putting of people in camps of detention and keeping them there five days was unwise. Coming from a section that had shown it was anxious to welcome refugees, he would much rather have refugees who stood not on the door of their going. He thought depopulation in cases of yellow fever wise and practicable. Yellow fever was the best thing in the world to run from.

Dr. Cochran did not think that any prudent people would care to have people taken out of infected houses or squares

amongst them.

Dr. Horlbeck thought the time of probation ought to be ten, instead of five, and a motion was made to that effect. Carried.

Dr. Rutherford said he could not leave the time of probation at five days; he could not go back to Texas.

Dr. Cochran said we were not here to represent the views

of our constituents like a legislature. Our mission here was to give the people the benefits of scientific researches which would control legislation and public opinion.

The resolutions were then adopted. Adjourned until 10 A. M. to-morrow.

SECOND DAY.

Preliminary to the session an address was delivered by Col. W. F. Morse, of New York, upon the CREMATION OF GARBAGE, REFUSE AND DEAD ANIMALS, by the method used: by the Engle Sanitary and Cremation Company of Des-Moines and New York. He said that under the old system of disposing of effete and noxious matter—the dumping into streams or spreading upon the ground, or converting into fertilizers without previous preparation—there is danger of poisoning the water, earth and air, but complete safety can be secured by complete destruction of these dangerous matters by fire. To construct a furnace moderate in cost, economical in fuel, capable of destroying quickly all varieties of waste matter, with practical freedom from noxious smoke and gases in the operation, and affording a product which will be remunerative for fertilizing uses—this is the ideal furnace sought for. It is claimed for the Engle Cremator that it fully meets all these demands. The furnace for destruction of city garbage and night soil is a brick structure 20 feet long, 6 feet high and 4 feet wide, inside measurement. The matter is deposited through shafts in the top upon grates, and at each end a fire of wood or coal is built. The heat and flames of the first fire passes through and over the matter, evolving a mass of gas and smoke which passes into the flame of the second fire, extending underneath the grate, thus suspending the garbage between the two intensely hot frames, and completely burning to ashes all the contents

The President called the Conference to order at 10 A. M. RAILROAD QUARANTINE. The committee's report on paper of Col. J. C. Clarke, of Mobile, was presented, recommending the adoption of uniform quarantine rules, and to prohibit shipments of freight from an infected city, but freight might be brought through such city. The report further recommends the adoption of rules for the government of quarantine, which shall be posted for public infor-

mation.

Dr. Cochran did not think that part of the report which

would prevent persons and baggage being hauled from infected places should be adopted. There was no necessity for such a stringent rule or regulation.

Without following all the details of the lengthy discussion, the amendments, etc., the following propositions were

finally adopted as the voice of the Conference:

SECTION 1.—During the prevalence of yellow fever epidemics, passengers and freight should be brought from infected localities only under such regulations and restrictions as may be established by the State health authorities along the lines of the roads concerned.

The regulations and restrictions governing railroad transportation during yellow fever epidemics should be of such character as to afford all reasonable guarantees of protection to the communities in danger of invasion by the disease, but should not be more onerous than the circumstances warrant, and should be framed with due consideration of the extent of the danger in each particular case, and as affected by latitude and seasons of the year, and other qualifying conditions.

At all seasons of the year and under all circumstances, the simple passage of railroad trains should be allowed, without obstruction, even when carrying sick refugees from infected places to healthy localities willing to receive them.

SEC. 2.—A well digested quarantine formula, making and promulgating the necessary rules and regulations for enforcing the same, should be prepared ready to put in force when necessary to do so, at all points where it is necessary to put quarantine in force. These rules should be published for general information, to enable all persons to comply with the same, and displayed by placard in every depot.

SEC. 3.—At all quarantine stations accommodations should be provided for caring for such persons, if any, that may be detained, or not permitted to pass through such stations

while in transit until they can be disposed of.

Sec. 4.—Only competent physicians who have had experience with contagious and infectious diseases, should be made inspectors of quarantine stations, whose duty it shall be to inspect and examine the condition of passengers, baggage and express matter. All inspectors should have the power to administer oaths and to remove from the trains at quarantine stations and detain such passengers, baggage or express matter as may be found necessary to prevent the introduction or spread of infectious or contagious diseases of any kind.

SEC. 5.—State Boards of Health should be the powers authorized to put quarantine in force. They should determine when, where, and for what length of time quarantines should be maintained; provide the means necessary for enforcing the same, and promulgate rules and regulations for conducting quarantines. Presidents and Secretaries of State Boards should be required to visit and inspect all quarantine stations as often as practicable during the existence of such quarantines. Local health officers municipal or county authorities, may establish quarantine regulations, confering with the State Board, if deemed necessary for co-operation. The regulations for governing local quarantines should not conflict with the rules and regulations adopted by the State Boards of Health for enforcing quaarntine regulations.

SEC. 6.—The refugee stations as at present operated on the sea-coasts of the United States are, in the opinion of this body of infinite service, and we would recommend thier continuance in a full equipment for all requirements.

SEC. 10.—Railroad agents at way stations should be required to refuse to sell tickets to any person who cannot show that they have not in twelve days been exposed to any source of infection, and conductors should be required by law to refuse to transport passengers from way stations who are

not supplied with tickets.

SEC. 11.—Health certificates should be required from persons whenever yellow fever prevails in this country. They should be issued only by the health official, under official seal, or, in the absence of such seal, under ehe seal of the municipal or county court, where the certificate originated. In each certificate the person to whom it is issued should be so described as to admit of his identification, and should state the facts of the case fully and circumstantially. And to such certificate full credence should be given by all health authorities. We must have honesty and mutual confidence amongst those charged with the protection of the public health.

Upon examinations of Dr. Wilkinson's paper the com-

mittee offers the following resolution:

Resolved, That this Conference adopt the Holt quarantine and disinfection system, as at present operated in New Orleans, as the best one known for the prevention of the introduction of yellow fever into the ports of the United States, and recommend its adoption. Adopted.

Adjourned until 3 o'clock P. M.

AFTERNOON SESSION.

Reassembled at 3:30 P. M.

The considera ion of topics recommended by the Committee on Business was resumed, and the following questions were taken up in order:

- Ques. 4. Is it practicable to cause depopulation of large cities?

 Is it necessary to secure additional legislation to compel persons to sojourn in camps of refuge? Tabled.
- Ques 5. Are probation camps desirable? By whom should they be managed and supported? What period of time should elapse from the time of arrival at camp until the granting of free passage? Should probation camps have a separate yellow fever camp? Should the certificate of the officer in charge of a probation camp entitle a person to enter free any other place? Tabled.
- QUES. 6. ON THE OCCURRENCE OF A CASE OF YELLOW FEVER, WHAT IMMEDIATE MEASURES OF ISOLATION ARE DESIRABLE?

Dr. Ross, of Florida, thought a reasonable time should be given those who could get away, to do so, and that then egress from the town be sealed up, and only supplies and nurses sent in. He then cited the great difficulty, if not impossibility, of stamping out yellow fever, because the first case is rarely ever reported.

Dr. Hamilton gave a history of the single case of yellow fever, which appeared in Blackshear, Ga., last summer, but from which the town was spared an epidemic by means of

isolation.

Dr. Cochran said the question was fully answered in the

following suggestions, which were adopted:

When one case or a few cases of yellow fever occur in any community, it does not follow of necessity that the disease must spread and become epidemic. On the contrary, the experience of many countries, through long periods of time, shows conclusively that in the majority of such instances, and without the observance of any special means of prophylaxis, the disease fails to spread.

When one case or a few cases of yellow fever occur in any community, in the light of our present knowledge of the habits and modes of propagation of the disease, it is generally possible, by the proper prophylactic measures, to pre-

vent the development of an epidemic.

The golden rule for the prevention of the spread of yellow fever is non-intercourse—isolation—the keeping of the well away from the sick, away from infected things, and

very specially away from infected localities.

In the enforcement of this rule, non-intercourse, two problems present themselves for solution (a) To keep the people generally from coming into the infected houses and the infected localities; and (b) To keep doctors and nurses and other attendants and the well members of sick families from visiting and mingling with people outside of the infected houses and localities. The solution of the first of these problems is comparatively easy. The solution of the second is sufficiently difficult. But it is possible to solve them both.

In the densely settled sections of cities, guards may be useful for the enforcement of non-intercourse. They are much less needed in sparsely settled towns. In villages and county neighborhoods, as a rule, they are not needed at all. In all cases, every intelligent family should be able to take care of itself—should be able to keep all of its members away from infected houses and localities, and to guard its own premises from invasion by dangerous persons and things.

Non-intercourse may be practiced in the very centre of an infected district with considerable probability of escaping the fever. Cloistered convents and prisons in infected cities, with yellow fever raging all around them, usually escape invasion; and there are numerous instances on record in which private families in the midst of epidemics have passed the ordeal safely by the vigorous enforcement of non-

intercourse.

QUES. 7. WHAT MEANS OF DISINFECTION SHOULD BE ADOPTED FOR CHAMBERS, AND DWELLINGS WHERE CASES OF YELLOW FEVER HAVE OCCURRED?

Dr. T. Grange Simons, of Charleston S. C., offered the following as expressive of the views of the Conference on this topic, which, after full discussion, was adopted by a majority vote:

This Conference recommends that all improved methods of disinfection by ventilation, fumigation or chemical effusion of infected or suspected things, should be used during an epidemic and until the danger of its spread shall have passed, and that all places should be disinfected until after the recovery of the sick.

QUES. 8. WHAT SYSTEM OF DISINFECTION SHOULD BE ADOPTED FOR THE DISINFECTION OF PERSONAL BAGGAGE OF PERSONS FLEEING FROM AN INFECTED PLACE?

Dr. Hamilton said that when the question of the escape of people from infected Florida came up last summer there was no time to prepare elaborate machinery for the disinfection of baggage. A freight car was first used, and sulphur was burned on the floor, and baggage was kept in the car with the fumes for twenty-four hours. After using this temporary expedient some time, a warehouse was engaged, where the work was carried on. He thought the Government ought to construct cars with steam chambers with superheated steam so as to move from place to place as the exigencies of the case demanded. Such plans had already been filed at government headquarters, and he hoped to have the cars ready in case they should be needed this summer.

Dr. Foster thought the plan of burning sulphur a good one. Dr. Baird said that Atlanta relied entirely on sulphur and lime whitewashing during the time of scarlet fever.

President Wilkinson (Dr. Bailey in the chair) offered a motion that heat had been found to be the best disinfectant; that of moist heat is the best known disinfectant. Adopted.

The Conference adjourned to 8 P. M.

NIGHT SESSION.

Meeting was called to order at 8 P. M.

Col. J. C. Clark introduced a resolution that a committee of one from each State be appointed for the purpose of formulating rules for the government of quarantines, which rules shall be published and recommended for adoption in regulating quarantines. Adopted.

President Wilkinson introduced to the Conference Dr. George M. Sternburg, Retired Surgeon of the United States

Army, who delivered an address on

HUNTING THE YELLOW FEVER GERM.

He took the position that the cause of yellow fever was a living organism, and while fully satisfied by the discovery

of actual living microbes, he was not discouraged or shaken in his belief that a living microbe does exist, and is the agent in propagation of the disease. He had made hundreds of investigations, and had found many interesting features, several of which resembled others found by wellknown searchers for information of this disease. He would continue his researches in Havana during the coming summer. At Decatur, during the past summer, he made investigations on dead bodies of 39 yellow fever victims, nine recovered patients, and several healthy persons, in which investigations he had found many organisms, which he has now in course of cultivation, and several of them living, but whether one of them would prove to be the long-looked for yellow fever microbe, he could not tell. He described the method of growing microbes, and passed about the audience a number of specimens, giving fully the history of each. A large number of magic lantern views were shown, describing different specimens of microbes, several of which had at some time been claimed to be the yellow fever germ, a claim which was not borne out by Dr. Sternburg's researches on the subject.

Dr. V. C. Vaughan, of Ann Arbor, Michigan, owing to the late hour, would give only a brief resumé of his paper—

PTOMAINES, OR THE POISONS GENERATED BY FEVER GERMS.

If a child was born in a condition of the highest health. and should live, taking only the healthiest of food and drink, yet he would in time die. If a flower or plant is left to itself, always surrounded by its own offal and exhalations, it will die. In the same way, if man is at all times surrounded by his excrement, he will sicken and die. showed that the food taken is primarily poison and would produce sickness, mental disorder, or death, if injected into his blood. This food is assimilated by the liver, and when that organ becomes torpid it cannot eliminate or assimilate these poisons as rapidly as they are taken into the body. The balance between the taking into the system of food poisons and their elimination is a most delicate one, and if it is overthrown disease certainly follows, and death frequently results from the development of ptomaines. Vaughan then cited instances where diseases resulted from this cause, and were attributed to other causes. Dr. Vaughan's lecture was highly interesting in substance, and was delivered in a most pleasing manner. He concluded with a concise definition of an epidemic disease.

Adjourned to 9.30 to-morrow morning.

THIRD DAY.

The Conference was called to order at 9:30 A.M.

Dr. Daniel M. Burgess, of the United States Marine Hospital Service, inspecting physician at Havana, read an ablyprepared and very interesting paper on the subject of

Sanitary Inspection Service at Havana, Island of Cuba.

He spoke with great earnestness of the careless manner in which health certificates are issued to ships and sailors coming to United States ports. He mentioned one case where a ship had been given a clean health certificate, and, on investigation, proved that there were several cases of yellow fever on board before the vessel got out of port. He also spoke of the promiscuous smuggling of merchandise from the island into the United States. There was not so much danger in

the operation of one or more steamship lines.

Dr. Wilkinson stated his experience as to the reliability of health certificates issued by United States consuls, and cited instances where the same consul had issued two certificates entirely different in nature, both issued the same day. He gave an outline of the methods of the Tampa quarantine in connection with the Plant steamship line, giving the requirements made of a passenger before he is allowed to land. It was useless to indulge in crimination or recrimination regarding the origin of yellow fever in Jacksonville; rather let the Tampa quarantine be considered, and let it be shown if it would be possible to introduce fever into Tampa by the Plant line of steamers in spite of the Tampa quarantine.

Dr. Wall was satisfied that it is not shown that a single case of fever was ever brought into Florida by the steamers of this line. No quarantine is perfect, but the Tampa quar-

antine was as good as any in existence.

Mr. Ingraham, representing the Plant line, made a statement of the methods in use on the steamers of that line to prevent the possibility of bringing the germs of yellow fever to this country. He detailed the construction of the vessels used and the measures of fumigation to which all baggage is subjected. The company had more than one thousand claims for damage done to fine clothing by the fumigation. The Plant system did not desire to endanger the health of the country, and if it was so regarded the company would discontinue its steamers.

Dr. T. Grange Simons, of Charleston, S. C., thought that

disinfection was in a state of experiment, and at this time the only point at which this system is in any way perfect is at New Orleans. He did not think there was any assurance that the Plant system of fumigation was always enforced.

Dr. Cochran thought the Plant system had done more than any line of vessels coming to this country. Rather than increase the restrictions of the company, they should be relaxed. That is doing much more than is done on any line of vessels going to New Orleans. If anything is done to further protect this country, it should be at the port; and he suggested that a fumigation or disinfectant station be established at Tampa. A legitimate line of travel between Cuba and the United States would tend to decrease the probability of introduction of disease into this country.

A resolution offered by Dr. Wilkinson, that the Government be requested to break up the practice of smuggling from Cuba into Florida, as this practice is a menace to the

health of this country, was unanimously adopted.

Dr. Porter gave a detailed history of the appearance of yellow fever into Key West in 1886, and the manner of its introduction. The Plant steamers were so constructed as to render them very easily cleaned. Something had been said about Dr. Nelson's "blue suit," which he wore from Havana to Tampa without disinfection. Dr. Porter said the suit which he was wearing had been many times in contact with yellow-fever patients. It had never been fumigated, but it had been aired, and there was absolutely no danger in it now.

Dr. Hamilton outlined the work of the consular weekly report system, with a few items of the cost of obtaining information by cable and the extreme difficulty of consuls to obtain correct information. The Spanish government at first objected to placing Dr. Burgess as a yellow-fever inspector at Havana, and he was only allowed to remain at the earnest solicitation of the Secretary of State. He spoke of the need of physicians being attached to consulates in which epidemic diseases are endemic, and he hoped the Conference would adopt a resolution calling on Congress to take this action. He favored the appointment of inspectors at every port of entry in the country, and the increase of inspectors, but he did not think that it would be necessary to establish more quarantine stations. He would recommend, under the new quarantine law, that when a vessel reached any port in this country in a filthy condition it would be subjected to ordinary fumigation, and in event of the second arrival of the same ship within a year, in a filthy

condition, it would be subjected to an extraordinary fumigation. The cost of these fumigations would cause the vessel owners to be more careful as to the cleanliness of their vessels. He had visited the vessel which brought yellow fever to Pensacola the last time that disease was brought there, and he had found it the filthiest ship he had ever seen. Dr. Hamilton then spoke of the proposed quarantine stations at Dry Tortugas and on the Pacific coast.

Resolutions by Dr. Wood, of North Carolina, and Dr. Foster, of Georgia, asking Congress to appoint sanitary officers and medical experts in foreign ports where infectious

diseases are epidemic, were adopted.

Dr. W. C. Van Bibber, of Baltimore, read a paper on

THE QUARANTINE OF THE FUTURE.

The following extracts give the chief suggestions of his

design for a "system of quarantine":

The diseases now quarantined in this country (I need not speak of such rare and exceptional cases as Asiatic leprosy) are three: Small-pox, cholera and yellow fever. What physician is there who has any dread of small-pox in his own person, or for his immediate family, or his obedient patients? The physicians of England have nearly convinced the world that the spread of cholera may be checked by sanitary measures. It only remains then to speak of yellow fever. It is the clear and urgent duty of us Americans to prevent the introduction or the domestication of this pest-germ on our soil if we can. The germ has been most frequently brought into Louisiana, Texas, Alabama, Georgia, and the Carolinas. But all the States have a common interest in excluding this germ and this disease.

An establishment may be erected which will in time become the centre of study, of information, and of authority upon these points—an asylum for patients, a place for isolation and for controlling communicable diseases by subduing the germ. It consists of four buildings, kept apart; a separate hospital for each of the quarantined diseases, and a building for the administration. These four buildings are connected with all parts of the State by railroads and telegraphs, and with each other by railways, telegraphs, telephones, etc. It is intended that the spacious grounds shall be laid out as a park, portions being reserved for the exercise and recreation of convalescents, and other portions for those who come from an infected locality, but exhibit no

symptoms of the disease, and who, of course, are most likely to be impatient under detention. Every practicable arrangement should be made to render their sojourn as pleasant as The whole establishment should be located in as attractive and healthy a site as possible, and given as much the air of a summer health resort as may be consistent with the purposes for which it is destined. The main building would be the place at which all information should be centered and from which all authority should emanate. would be the headquarters of the medical staff; here should be kept models and designs for building; here should be exhibited the highest standard of cleanliness; here should be formulated sanitary rules. Each subsidiary department should be complete in itself. The small-pox department should undertake to keep on hand thoroughly reliable vaccine virus, and distribute it throughout the State.

The working of such an establishment would be something like this: On the appearance of quarantinable disease, or the landing of passengers from an infected locality, the staff would be immediately communicated with. At once officers would be dispatched to remove the infected or suspicious persons, to investigate the circumstances thoroughly, and to take all necessary measures. The presence of these officers, and the knowledge that the matter was being promptly and efficiently dealt with, would quiet alarm.

The practical advantages of such a system as I have de-

scribed may be summed up as follows:

1. It would prevent panics; for nothing could be more reassuring to a community than the knowledge that there was such a body of men at all times ready to meet the first appearance of disease, and thoroughly provided with the means to cope with it.

2. It would give the greatest facility for preventing the outbreak of an epidemic, and subduing the germ if it made

its appearance.

3. It would give the best possible facility for the recovery of patients attacked, by combining the most effective medical treatment with the most perfect possible sanitation.

4. It would be a headquarters for all movements in the direction of hygiene and sanitation, whether these should take the form of warning, or instruction to the people, suggestions to medical practitioners, or recommendations for legislation.

5. Each of the establishments would be in communication with other similar establishments in the country or the

world, so that whatever advance was made or knowledge acquired at one would at once enure to the benefit of all. Thus each would possess at once the highest possible authority, and would be a school at which medical practitioners could learn the latest results of science in every branch that came within its scope.

Such an establishment should be built upon a large domain. It seems to me that this might best be done in Flo-

rida.

A PLEA FOR YELLOW FEVER INOCULATION AS A PROPHY-LACTIC MEASURE

Was the title of a paper by Dr. Gaston, of Atlanta, Ga. He took the position that yellow fever might be prevented by the system of inoculation. While Dr. Sternberg, in his lecture, doubted the discovery of the germ of yellow fever, the theory advanced by Dr. Vaughan, that the disease was produced from the dead germ, he thought that the remains of the dead germ should be sought rather than the living germ. The theory of inoculation for yellow fever is new, but instances and results in Brazil showed the efficacy of the practice. He closed with a resolution that the theory of inoculation be thoroughly investigated.

Dr. Sternberg had visited Rio de Janeiro and made a thorough investigation of the practice of inoculation followed there by Dr. Frier. His voluminous report had been in the hands of the President. He found the Doctor's statistics fallacious. Of those inoculated by the Doctor, a large number, who had been exposed, died, and large numbers of others had the disease. He gave an explanation of the manner in which many of Dr. Frier's inoculations were made, and he had found no evidence that his method

of inoculation is of any practical value.

Dr. Wilkinson offered a resolution to return the thanks of the Conference to Dr. Gaston for his paper; but in view of the fact that the theory of inoculation is new, that the resolution bearing on the subject be laid on the table.

Adopted.

Dr. Sternberg read some notes on the examination of specimens of black vomit through a spectroscope, which proved that the pigment in black vomit is a pigment of the blood.

Ques. 9. When May Refugees Return to Their Homes? Dr. Ross thought that generally refugees could return after two white frosts, but had known instances where deaths occurred among those who returned after such frosts, but in all instances the parties lived in houses which had not been opened and ventilated.

Dr. Hyer offered a resolution that they may return after the formation of ice, after three killing frosts, or when no new cases have developed for two weeks, and in cases where the houses and bedding have been thoroughly disinfected. Adopted.

QUES. 10. IS THERE ANY AUTHORITY THAT YELLOW FEVER WILL HIBERNATE FROM ONE YEAR TO ANOTHER IN THE UNITED STATES?

Dr. T. Grange Simons took the position that it was possible for the fever to remain dormant from one year to another. He thought that several instances had been cited to prove this.

Dr. Earle, of Kentucky, thought that there existed in this country a spore, which in itself was harmless, but which became fructified by importation and produced yel-

low fever.

Dr. Wall, of Florida, gave briefly the history of the fever in Tampa, in 1887, and the measures taken for protection

of returning refugees.

Dr. Hyer thought that the question was one for scientists, and not for such a body as the Conference, and after citing instances of supposed hibernation, which by many were doubted he offered a motion that the subject be indefinitely postponed. Adopted.

Dr. Wall offered the following:

Whereas, of late years almost, if not all the epidemics of yellow fever which have occurred in this country, costing many millions of dollars to the citizens thereof, besides causing the loss of many valuable lives, have been directly traceable to infection brought to its shores from the Island of Cuba, and more especially from the city of Havana; therefore, be it

Resolved, That it is the sense of this Conference that, by proper means, the disease can be stamped out of the Island

of Cuba.

Second, That it is the opinion of this Conference that the Government of the United States should notify the Spanish Government that the disease must be abated or brought under control within a reasonable period of time; that if af-

ter the lapse of such time nothing has been done toward the abatement of this international nuisance, it is the opinion of this Conference that the United States Government should take control of the Island of Cuba, and proceed to destroy the cause of the disease at its fountain head.

These resolutions raised a laugh and a second.

Dr. Plunkett offered as a substitute, that a committee of three be appointed to report an expression of the Conference on the subject.

The chair appointed Drs. Hamilton, Ross and Plunkett.
The following resolution, introduced by Dr. Hamilton,
was reported by the committee as the expression of the Conference:

Resolved, That this Conference is of the opinion that it is a duty devolving upon all nations to take measures to eradicate any plague centres from its territory, and that the existence of such plague centre is a menace to all other nations; and that our State Department be requested to take measures, through proper diplomatic channels, for the conveyance of this opinion to the governments deemed obnoxious to the opinion as herein expressed. Adopted.

Conference adjourned sine die.

Analyses, Selections, etc.

Plaster-of-Paris Treatment of Fractures.

Dr. W. F. Westmoreland, Jr., of Atlanta, Ga., presents so practically (Atlanta Med. and Surg. Jour., March, 1889), the method of applying, and the advantages accruing from a general adoption of this means of treatment of fractures of the long bones especially that we make almost a complete copy of his article. He begins with the statement that every plaster-of-Paris splint must be properly applied, of appropriate material, with the fragments of the fractured bone properly adjusted to give the results. For a time this splint was used only in simple fractures, but now, we use them in compound comminuted fractures, with the best results, often saving a life or a limb that was formerly sacrificed.

Preparation of Material. The bandage should be ordinary cross-barred crinoline, that has had all the starch washed out. The starch makes the crinoline stiff, prevents its hold;

ing enough plaster, and keeps the plaster from setting. Crinoline is better than gauze or cloth; gauze pulls unevenly, and the meshes of cloth are too fine to hold enough plaster to make a stout splint. Get the best plaster, in unbroken cans; always test it by adding a little water to it, and see that it sets properly before using it. Put a small quantity of plaster on a table and rub it thoroughly by hand into the meshes of the crinoline, having an assistant to loosely roll the bandage as you rub. See that the plaster is evenly and smoothly distributed over the bandage. No machine for this purpose is worth the room it occupies. Prepare a number of bandages at a time, having two or three widths, and pack them in a tin bucket, made air-tight. If placed in a dry place, they will keep indefinitely Next, vou will need flannel roller bandages; do not use cotton under the plaster splint; it is not comfortable, is constantly damp by perspiration, becomes offensive, and often excoriates the skin. He uses a medium heavy red flannel for the bandages. Add a few pieces of perforated tin slips and a

tape line and we are ready for the operation.

To illustrate the application of a splint, we will suppose a call that "Tom Jones has broken his leg. Come at once and fix it up." The things are all packed in a satchel, and we are on our way. The satchel contains a bucket of plaster-of-Paris bandages, half a dozen flannel roller bandages. a pound of ether, a few narrow strips of perforated tin, a tape-line and a pair of scissors. We find Tom is a very stout, muscular man, weighing about two-hundred pounds. with an oblique fracture of the upper third of the right thigh, with two inches shortening. One assistant etherizes the patient, and the other gets things in order. An old sheet is put by the bed to cover the carpet; on it, in easy reach, put a basin of cold water; place the plaster bandages close beside the basin, and have the flannel bandages at hand. While this is being done, tie a few large books securely together, then wrap a towel around a broom-stick and fasten it. By this time Tom is etherized. Put the broom-stick down, inside the side railing of the bed between two of the slats, upright, while the end of the handle rests on the floor; an assistant holds it in this position. Now pull Tom across the side of the bed until his buttocks rest on the edge, while his legs hang over it, with the broomhandle between them, pressing against the perineum. Have Tom lifted, and put the book under his left buttock. This keeps him raised high enough to get around the pelvis with my bandage.

The assistant makes slow and steady extension; counter-extension is made by the broom handle, held firmly against the perineum. The towel wrapped around the broom-handle protects the perineum from injury. The slow, steady extension is kept up until the fracture is reduced; I hold both legs up side by side, and satisfy myself by exact measurement with the tape line, that both legs are the same length; keep up the extension all the time the bandage is being applied.

A flannel roll bandage is now applied, including the foot, extending up the whole length of the leg and around the pelvis, taking care that the bandage lies perfectly smooth,

without any wrinkles.

Take a plaster bandage out of the basin where it has been placed, end upwards, with water enough to completely cover it, and squeeze out the excess of water. As the bandage is taken out of the basin, have a fresh one put in, and it will be ready by the time the former is used. The evidence that it is ready for use is that the bubbles of air have ceased to The plaster bandage is smoothly applied over the flannel in the same manner that an ordinary roller would be, making the reverses whenever necessary. Do not pull the bandage, or exert pressure. Carry the bandages up the leg, including the foot and around the pelvis, going up as high in the perineum as possible. The idea is to fasten the leg immovably to the pelvis. As the bandages are applied, rub them thoroughly with the hand to squeeze out any air that may have gotton between the layers, and to rub the plaster into the meshes of each succeeding bandage. Make a number of extra turns around each joint, and work in a piece or two of perforated tin, letting them extend from below the knee to the crest of the ilium, to strengthen the splint at those places, where the greatest strain exists.

There is no rule as to the number of layers to apply, but it must depend upon the character and seat of the fracture,

and the the muscularity of the patient.

Within a couple of hours of the receipt of the injury, the splint is applied, and when Tom recovers from the ether, he can turn in any direction, and occupy almost any position on the bed without pain. In fractures of the thigh, I do not let patients out on crutches for the first week.

Several points in the application of the plaster splint he especially emphasizes. The most important is the *immediate* application of the splint. Most book-makers especially—advocate waiting until the swelling has subsided. What

are the advantages of waiting? It is claimed that by waiting till the swelling subsides, the numerous accidents that are said to follow the immediate application, are to a certain extent eliminated. If there was no other argument, it suffices to say that most of the men who advocate waiting, are the very men in whose hands these accidents occur, who report them, and who abandon this method with dissatisfaction and disgust. Experience is an excellent spy-glass; but it has this draw-back, that prejudice very often clouds the lens. One of our able book-makers is not even able to give personal experience as a reason for his prejudice, but he abuses and condemns this, as he does other splints, that

he may better advocate his own.

There must be some reason for these failures. What are they? Surgeons who adopt the plan of waiting before applying the plaster splint, will resort to any temporary expedient to control the fractured bone. Unfortunately, the fracture is never controlled by these devices. The fragments are not held in apposition, the sharp ends of the fragments are continually piercing the soft parts with every movement of the patient, and every spasmodic movement of the muscles. The result of this continued irritation is inflammation and swelling. After a time, the swelling subsides sufficiently to suit the surgeon, and the plaster splint is applied. Later, and often before the bones unite, the swelling disappears—the splint being too loose to retain the fragments in position, the union is retarded, and when the bone at last unites there is often deformity, and if it be an oblique fracture, the limb is shortened.

In the immediate application, the limb has not had time to swell, extension is kept up until the limb is enclosed in a splint that is accurately moulded to all the irregularities of the limb, both joints connected to the injured bone are fixed by the bandages being moulded into the bony prominences and depressions. This perfect adaptation of the splint to the inequalities of the limb absolutely prevents all motion. makes shortening an impossibility, and secures the complete immobility of the limb in a position in which it is put up. The fragments are held in perfect apposition. It is impossible for the ends of the broken bone to puncture and irritate the surrounding muscles. There are no spasms of muscles; no irritation; therefore it is impossible to have inflammatory turgesence or swelling, and there is little danger of the splint getting tight. I have put up a fractured thigh where eight inches of the bone had been comminuted by a

62

car wheel. Another, a compound fracture of both thighs by a street-car wheel. Another, fracture of the upper third of the thigh, with fracture of the lower third of the same bone, with separation of the condyles. In neither of these was there any tightness, nor did the splints have to be removed, although in each case the splint was put on immediately after the injury. Watch the patient closely. put on a splint and not see it for two or three days. instructions that if the splint feels too tight, or the patient's foot or toes get cold or swell, to send for you; you may have to make many unnecessary visits, but in these cases it is better to make numerous unnecessary visits, than to fail to

make the one that is necessary.

Always use an anæsthetic in the reduction of any fracture that requires considerable force. The principal cause of trouble in the displacement of fractures is the muscular contraction, and in reducing them, one main difficulty is to overcome this muscular action. No amount of extension or counter-extension will bring the fragments into position, much less retain them there, unless all muscular influence is removed. As this is true, the most natural way to overcome it is to etherize the patient. This does away with all possibility of having to use pulleys. The patient suffers no pain; is perfectly quiet, which is very important. There is no sudden contraction of the muscles at the wrong time. Never use pulleys to make extensions, or you will be apt

to put up the limb in a bad position.

Compound Fractures.—No compound fracture by itself, no matter how extensive the comminution, is an indication for primary amputation, unless there is an accompanying irreparable destruction of the soft parts, including the large No doubt, this seems an extreme principle, blood vessels. but my experience in the treatment of compound fractures by this method, has convinced me that many limbs have been sacrificed to the surgeon's knife, which, had they been left on, would have been of infinite value to the patient. Nor is argument needed to convince any one, "especially the patient," that it is better to leave the limb in its natural position than to remove it, and bury it forever out of sight. John Hunter said, two hundred years ago, "Surgery consists in curing a disease, rather than in a removal of it by mechanical means." But so differently do most people think on this subject, that a surgeon who performs the most operations, and gives most pain, is commonly thought the best.

When called to a compound fracture, I immediately etherize the patient, and am better able to reduce the fracture without muscular resistance, and retain it in perfect position; also to more thoroughly cleanse the wound.

Upon the thorough antiseptic cleansing of the wound and surrounding parts, and complete removal of foreign and irritating matter, depend the quick and successful issue of the case, and in some instances even the life of the patient.

In no cases is a disregard of antiseptic details so inexcusable as in these. As soon as I see the patient, I cover the wound with a towel wrung out in bichloride solution (1:500), and while the patient is being etherized, I cleanse the surrounding parts with the same. When the patient is thoroughly etherized, reduce the fracture, making the opening larger, if necessary, for the easy replacing of the bones. Then I cleanse the wound, cutting the tissues until I can reach and touch every part of the wound with bichloride solution. For this I generally use 1:500, and afterwards wash it off with a weeker solution (1:2000). The instrument should be kept in carbolized solution (1:30 or 1:40). All arteries should be ligated with cat-gut, and hæmorrhages stopped, and the wound closed with cat-gut sutures. Establish drainage either with rubber or bone drainage tubes, or cat-gut drains. Over the wound, place a thick layer of antiseptic gauze, and apply the flannel bandage, followed by the plaster-of-Paris as previously described. I am no advocate of heavy dressing under the splint, as this is sometimes the cause of accidents, by preventing the splint keeping the bones in apposition. I would rather cut a trap-door in the splint and re-dress through it, as I have done successfully in a number of cases.

I have been very much surprised that Scede's method of union has not been advocated in these cases, and I take this opportunity of advising it, especially in those cases where there is a great destruction of the soft parts. For, as Gerster says, its simplicity and independence of the presence or absence of a sufficient covering of skin, commends it to the

surgeon.

Scede's method consists in making use of the organizing power of the moist blood clots. He thus supplies the wound with a plastic material, rendering both drainage and compression unnecessary. Important arteries should be tied—the filling of the wound with blood being left exclusively to parenchymatous hæmorrhages. When there is enough skin to close the wound, a small opening should be left at

the upper angle to allow the drainage of superfluous blood; a piece of rubber tissue without any holes in it, is placed over the wound, extending a small distance beyond its edge; this must lie closely and smoothly; it serves the double purpose of securing the complete filling of the wound with blood, and of preventing drying and evaporation, as well as keeping the bandage from absorbing any but superfluous blood. Then the rest of the dressing is the same as in other cases. It will be found that the blood in all parts of the wound, will coagulate, and will be gradually replaced without further secretion, by a permanent tissue.

Dennis (Medical News, November 13, 1886, reports 385 cases of compound fracture, with but one death, giving a mortality of less than one-third one per cent. Previous to the adoption of antiseptic methods, the rate of mortality in the best of the tables varied from twenty to sixty per cent.

Notes on a Case of Ununited Fracture of Forearm.

Dr. W. P. Nicholson, Dean of the Southern Medical College of Atlanta, Ga., reported (Atlanta Med. and Surg. Jour., March, 1889) the case of a white male, aged 42 years, March, 1888, who sustained a fracture of the right forearm, caused by the wheels of a horse-car passing over it. The fracture was dressed by a physician in the neighborhood. The following night he took charge of the case. The forearm was found bandaged to anterior and posterior board splints extending from ends of fingers to elbow; there was a high degree of inflammation and swelling of the soft parts; vesicles and bullæ on the hand and the arm. Made no change simply cut the bandage which was binding the swollen hand. The following day, on removal of bandage and splints, he found the entire forearm very much swollen and covered with vesicles. The physician who dressed the injury had pronounced both bones fractured just above the wrist; said, as far as he could judge, the fracture had been reduced and the bones well coaptated. Owing to the condition of the forearm, he did not make further examination or manipulation. After dressing with antiseptic gauze, he bandaged the arm to an anterior splint, and directed the bandage to be kept wet with an antiseptic lotion for a few days. Shortly after this he removed the straight anterior splint, and placed the arm upon an angular splint, extending from the axilla to the fingers. Everything seeming favorable, about the fifth week he instituted passive rotary movements, and continued it at intervals some two or three

weeks, with the result of re-establishing movements of pronation and supination. The patient was then dismissed, with instructions to call at office once a week.

A short time after being released from the bandages, the patient called his attention to motion at seat of fracture. that could be elicited by pressing the hand upon the table and contracting the muscles of the forearm. This movement, doubted at first, was so marked at his next visit, that he again placed the arm upon the right-angle splint. Three weeks confinement upon the splint, with attempts at friction between the fragments, resulted in no improvement. He then applied a plaster-Paris bandage, which was worn for some weeks; during the time, the patient attempting to work, and getting on a spree—the result of the treatment was negative. After this, the patient, constructing a leather splint which he could lace over the forearm, did some work, but did not resume his occupation. Becoming anxious about the usefulness of his arm, the patient again called upon him, and insisted upon having him perform an operation to restore, if possible, the union of the bones. The doctor then detailed the operation as follows:

November 24, 1858, assisted by Drs. Hagan, Divine and others, the operation was made. There was found a point about two inches above the wrist joint, almost as movable as that joint, and extending through both bones. There was decided thickening of the soft parts, causing a projection over the back of the radius. It was determined to cut down upon the false union, remove the intervening tissue,

and wire the ends of the bones.

An incision four inches long was made over the anterior border of the radius down to the bone. There was some deficiency in length of the incision at the lower part, on account of fear of wounding the radial nerve. The upper end of the lower fragment projected prominently about two inches above the wrist joint, and from this an oblique line of fracture passed downwards and outwards towards the ulna. There was complete fibrous union, binding the fragments closely and firmly together, so that their relative ends could not be displaced, though enough to permit free flexion. A strong cartilage knife was thrust between the fragments, and by pressing them apart, the fibrous tissue was cut through with the point of the knife. Then with chisel and rongeur, this was forced from the bone until crepitus could be elicited by rubbing the fragments with the parts held in position. A Brainard drill was passed first through the

projecting point of the lower fragment, and then obliquely through the edge of the upper fragment, and through the opening a silver wire was introduced and loosely twisted. The suture was not passed very deeply into the bone on account of being unable to very widely displace the fragments. An incision was now made over the inner border of the ulna, corresponding with that in the radius. patient was now taking ether so badly that he concluded not to wire the ulna fragments, but to trust to their being held in apposition by the splint. The radial wire was now tightened and twisted, and the tourniquet removed. was only capillary oozing; so the wounds were immediately closed with catgut, and drainage tubes inserted. During the entire operation antiseptic details were strictly adhered to, except in one instance, which will be mentioned later. The entire forearm was now enveloped in a gauze dressing. and over all a plaster-of-Paris bandage was applied, extending from the tips of the fingers to the upper part of the

On the following day the temperature reached 102°; there was considerable pain at the seat of the operation, and some staining of the plaster bandage by blood. The temperature gradually declined until it reached 99°; but little pain after first three days. On the twelfth day after the operation there was a sharp rise of temperature to 102°, and the patient said that some pus was oozing through the

bandage.

Assisted by Dr. Hagan, he removed the bandage, finding the dressing about the radial wound saturated with pus. and the wound, on account of yielding of sutures, gaping open. The ulna wound was free from suppuration; upon the back of the forearm, between the bones, was a fluctuating swelling, evidently pus, but not connected with either wound. Thinking this would find its way of exit through one of the wounds, it was not opened. The drainage tubes were removed, and a gauze dressing, with plaster-of-Paris over all, re-applied. In spite of the disagreeable result in the radial wound, there was evident bony consolidation of marked character. Six days after, on account of great pain the dressings were again removed, when the pus accumulations on the posterior surface were larger and the skin over it red and tense. The ulna wound was healed perfectly dry, and that over the radius was filled with healthy granulation. The abscess on the back was opened and drain inserted, and the forearm in a gauze dressing was

placed on an anterior board splint. There was increased strength of bony union. This splint was worn about ten days, when, upon removal of dressings, the wounds were found almost healed, and the pus cavity so small that the tube was removed, but the bony union appeared to have yielded some. Two days later, December 25th, in my absence from the city, an excellent plaster-of-Paris bandage was applied for me by Dr. Hagan. This was worn until January 12th, 1889, when it was removed, and the wounds found all soundly healed and bony consolidation practically perfect. As a matter of precaution, a Levis bone splint was applied and worn till to-night. The arm presents a very excellent appearance, and was examined by Drs. Westmoreland and Cooper, who could detect no movement whatsoever.

. Dr. Cooper asked if the patient had pronation and supination.

Dr. Nicolson replied that, as yet, he had not allowed him to practice either; preferred to have him wait awhile. As regards the suppuration, it was unexpected; he could only account for it in this way: that one of the gentlemen present at the operation did not disinfect his hands when requested to examine the bone, after denudation had been

accomplished.

The question was, what was the cause of failure to secure bony union? Cases occur in which the same means were used and no trouble. Other cases, where bones were not at all in apposition, became united. In resections, many times, even when passive motion is practiced, bony union will occur. "The principal factors in preventing bony union were divided into local and constitutional. Among the former we have malposition; motion, due to insufficiency of confining apparatus; injury to the nutrient artery of the bone; the interposition between the fragments of pieces of muscle, tendon, etc. Among the constitutional we have: pregnancy, syphilis, exhausting disease and intemperance. The failure to unite may be of different character. Bony material may not be thrown out at all, resulting in the absorption and rounding of the ends of the bone, and the formation of a "false joint." Again, the bony callus may be deposited, and, from some cause, re-absorbed, leaving only a fibrous connection. Lastly, the lymph thrown out may not reach the bony stage at all, but remain fibrous. Among the causes leading to the absorption of bony callus there have been mentioned many exhausting diseases, especially typhoid fever; but usually its results prove too early use of limb, especially the lower extremity, when there is much pressure. He is inclined to believe that the cause in the case related was the too early use of limb—though, usually, not so much time as was given in the case is necessary. Probably the life-long intemperance of the man (for he had been a drinking man from his youth

up) entered as a large predisposing factor.

Dr. Willis Westmoreland, Jr., said he had listened with pleasure to Dr. Nicolson's excellent paper. A doctor should always withhold judgment, for some cases occur wherein good results are expected and not obtained; and in others, when trouble is apprehended, the case passes on to a favorable termination. He mentioned a case in point, of a patient who had his leg fractured by a car-wheel running over it, and who had had syphilis; in this case he expected to have failure of union of the fracture, but did not: the bone united, and the man has a good leg. There is no such condition as absolute non-union. He would divide the subject into two classes, viz: those in which union is arrested at the fibrous stage; and those in which cartilage has been formed. The case reported by Dr. Nicolson belonged to the latter class. The causes of the arrest of union were sometimes very obscure; syphilis and defective innervation were sometimes prominent causes; keeping the patient quiet and in bed sometimes produced a phosphatic deposit in the urine, which indicated that a condition existed which was retarding the repairing process. This could be overcome by quinine, mineral acid, good diets, getting the patient up, and insisting upon moderate and gentle exercise, when pos-.sible.

His plan of treating fracture was to immobilize the fragments, as soon as possible, with a plaster-of-Paris bandage. He did not, in fracture of the leg, go above the knee, or below the ankel with the bandage; ordered his patient to walk about as soon as the bandage was firm. This moving around furnished the necessary irritation to bring about good results. He never had had a failure of union in any of his cases. He mentioned the case of an engineer, who had a fracture of the leg, in which process or repair was seemingly arrested at the fibrous stage; he treated it with a plaster-of-Paris bandage, and directed the patient to resume his occupation, which he did with no inconvenience, and his limb was soon restored to usefulness. He also spoke of the case of a farmer with a fracture of both bones

of the leg, in which there appeared to be a cartilaginous formation and free motion of the fragments; instituted the same treatment, and had a perfect union after the application of about five or six plaster-Paris bandages, during a period of some six months.

He did not think this treatment as applicable to the arm as to the leg or foot, because the same character and degree

of motion could not be had.

He then exhibited Gowan's instrument, modified by Wyeth, for re-section of the ends of fractured bone; said its advantages were, that it required but a small external incision, and that the ends of the bones could be cut off without having to pull them through the incision; could be used on both sides; he had re-sected a rib with it, and found its action very satisfactory. With regard to operation for ununited fracture, he liked using Wyeth's instrument and leaving the drill in position; next, the wiring of the ends of the bones, as to seton, etc., did not like anything of the kind.

Dr. F. W. McRae thought general medicine ought to be brought into use in the treatment of these kinds of fractures. Authors allude to the phosphatic deposit in the urine, as spoken of by Dr. Westmoreland, as showing a condition of the system that required aid. He suggested the use of phosphorus as a good and powerful adjuvant in these cases, especially when occurring in children.

Dr. Duncan thought the too free use of cold applications, and too tightly bound splints, were frequent causes of non-

union.

Dr. F. O. Stockton thought the dental engine would be of great assistance in drilling the holes through the ends of the bones, and do it very accurately. He had seen two surgeons' engines for this purpose. An ingenious one was invented by Dr. Bonwill, who also had a splint which he used in these fractures. His splint consisted of a steel bar, with holes at either end. Through these holes were passed steel rods. The bars had thumb-screws on either end; an incision was made over seat of fracture, and holes drilled through the ends of the bone, with the engine drill. Then this steel bar was placed over the incision, and the steel rods passed through bar and bone. On each end of the rods were buttons which were screwed up, and which held the rods firmly in the bone and bar. The thumb-screws would then be tightened, and thus bring the ends of the bones together, and hold them securely.

Dr. Cooper had had a case of ununited fracture of the tibia and fibula, in a negro girl, aged three years. The midwife had used force in extricating the child, which was born feet foremost. The mother noticed nothing wrong with the child until she attempted to walk; then she saw something was the matter with one of her legs. As soon as he examined the child, he detected fracture at the junction of the middle and lower third of the leg, and the foot was inclined at an angle of 45°. He operated, with the assistance of Drs. Nicolson and Greene, taking antiseptic precautions; made an incision over and down to seat of fracture. Found the bones imbedded in dense fibrous tissue: cut this all away, and divided the tendo-achillis: did not wire the ends of the bones. Used antiseptic dressing and plaster-of-Paris bandage, but failed to get any result. Tried making the child walk, but with no benefit. The child is now wearing a steel splint, with which she could walk very well. He thought that sometimes too free use of antiseptics had a great deal to do in weakening the repairing power of the parts.

Dr. Nicolson had thought of using the dental engine in this case, but did not get one. He was very anxious to use the drill with the aid of cocaine, and leave it in position, but the patient insisted upon his "cutting his arm." He had thought when he saw the pus, that the wire in the bone would give trouble, but in this he was agreeably disappointed. He could not tell if having the pus did any harm, but it was very disagreeable and unexpected. When he first saw the arm it was a bad one; the fracture had been properly reduced, his impression is, that the non-union resulted from the patient using his arm too early. He remembered a case of fractured arm which had united by bony union, when suddenly as it were, the bony portion entirely disappeared leaving only a fibrous connection. No cause could be assigned; the man was healthy and the conditions favorable, and yet the entire bony portion of union was absorbed. So in many cases, the cause of failure of union could not be found or explained. He expected his patient

to have a strong and useful arm.

Ingluvin in the Vomiting of Pregnancy.

Dr. Popp (Pester med. Presse, No. 40, 1888) reports having achieved considerable success with ingluvin in the vomiting of pregnancy. Having a very obstinate case, upon which he had exhausted the entire resources of the pharmacopæia

he administered three times daily, one-half hour before mealtime, eight grains of ingluvin, and directly afterward two tablespoonfuls of one per cent. hydrochloric acid solution. An improvement was observed after a few doses had been taken, and a cure effected after the treatment had been continued for three weeks.—Deutche med. Wochenschrift, Jan. 17, 1889.

Book Botices.

Favorite Prescriptions of Distinguished Practitioners, with Notes on Treatment By B. W. PALMER, A. M., M. D. New York: E. B. Treat. 1888, Demi 8vo. Pp. 256. Cloth. Price, \$2.75. (From Publisher.)

A notice of such a book amounts simply to its advertisement. The advertisement, however, is sufficient to commend it to all practitioners; for each one often has need for just such suggestions as this book gives. It is compiled from the published writings and unpublished records of such distinguished authors as Drs. Fordyce Barker, Roberts Bartholow, Samuel D. Gross, Austin Flint, Alonzo Clark. Alfred L. Loomis, F. J. Bumstead, T. G. Thomas, H. C. Wood, William Goodell, J. M. Fothergill, N. S. Davis, J. Marion Sims, William H. Byford, E. G. Janeway, J. M. DaCosta, J. Solis Cohen, Meredith Clymer, J. Lewis Smith, W. H. Thomson, C. E. Brown-Sequard, M. A. Pallen, W. A. Hammond, etc. The book is divided into seven chapters, or sections. Section I, for instance, gives prescriptions for diseases of the nose, throat, mouth, and chest. Section II, prescriptions for diseases of the abdominal vicera, etc. At the end of each section are a few blank pages, with printed head-lines, in which the owner may add any prescriptions of his own, in order to systematically preserve them. A first-rate index concludes the volume, which renders ready reference to a subject an easy matter.

Treatise on Headache and Neuralgia, including Spinal Irritation and a Disquisition on Normal and Morbid Sleep. By J. LEONARD CORNING, M. A., M. D., Consultant in Nervous Diseases to St. Francis' Hospital, New York, etc. Illustrated. New York: E. B. Treat, 771 Broadway. 1888. Demi 8vo. Pp. 231. Cloth. Price, \$2.75. (From Publisher.)

The author of this work has contributed so much of original work of a practical character to neurological subjects, and its value has become so generally recognized, that he

needs no praise at our hands. He treats of his subjects under the following headings: Headache, Neuralgia, Historical Consideration of Methods of Treatment heretofore Proposed, Irritative Conditions of the Spine, and Normal and Morbid Sleep. We cannot express ourselves as too appreciative of the merits of this book from a practical standpoint, when we say we do not know of its equal in value. The conditions treated of are of every-day occurrence in the rounds of the busy practitioner in city life especially, and the methods that are to be adopted to relieve them in individual cases are studied out so thoroughly, that the reader has scarcely to do more than absorb what he finds in this book, in order to apply the best principles for the relief of pain and the cure of the diseases that are curable. Ample details are given for the proper application of the different plans of treatment.

Editorial.

The Index to Annual Volume XV,

Which ends with this March number, 1889, will be printed and distributed with the April number, which will be issued during the first week of that month. Subscribers who wish to bind this volume will, therefore, have to wait until then.

The Transactions of the Medical Society of Virginia, 1888,

Have been issued. The Secretary of the Society has exercised great care in mailing the copies due to Fellows, etc.; but if any Fellow has failed to receive his copy, he should address at once, Dr. Landon B. Edwards, Recording Secretary, etc., Richmond, Va.

The Medical Examining Board of Virginia

Will meet in the Hall of the House of Delegates, Capitol Building, Richmond, Va., Tuesday, April 9, 1889, at 8 P. M. This evening's session will be for the routine business of the Board, such as arranging questions for examination, etc. The examinations of applicants for licenses will be begun promptly at 9 A. M., Wednesday, April 10th. The examinations will continue for two days. Every hour of the time from 9 A. M. to 11 P. M. of each day is occupied in the examinations (except the hours from 3 to 4 P. M. for dinner, and from 7 to 8 P. M. for supper). Applicants for examination

must be on hand from the beginning of the first examination; which will begin at 9 A. M. Wednesday. The first examination will be on Chemistry. The questions will be put on the blackboard at 9 A. M., and are taken down at midday (12 o'clock), when the questions for the next subject of examination will be immediately put up, and taken down at 3 P. M., etc. Questions once taken down, are not put up again. Hence the great importance of each candidate being punctual at 9 A. M. on Wednesday.

Each candidate undergoing examination is expected to sign a paper containing a statement to the effect that he has neither received nor given information on any of the subjects under examination during the time of the exami-

nation.

Any party wishing to be examined, should come prepared with the examination fee of five dollars, required by law, and report immediately to the Secretary of the Board (Dr. Hugh M. Taylor, of Richmond, Va.), who will be in the Hall a few minutes before 9 o'clock to issue, in due form, the permits for examination.

Candidates for examination are not allowed to leave the Hall after once entering it, until they have handed in their papers relating to the subject then on the blackboard. Furthermore, they are not allowed, during the progress of examinations, to communicate with each other verbally, by

note or by signs.

Visitors will not be allowed in the Hall during the examinations, except by official invitation of the Board; and under no circumstances will they be permitted to communicate with or interrupt the candidates during the time of

the examinations.

Candidates, in turning in their papers to the respective Chairmen of Sections, must sign them *not* with their names, but with the numbers assigned them by the Secretary, which numbers are to be known only to the parties and to the Secretary, and by which numbers only are the papers, as returned by the candidates, examined and marked by the respective Section Examiners. Each candidate will have a desk assigned him by number, and he is expected to occupy only that desk during the examinations.

The Johns Hopkins Hospital and Dispensary, Baltimore, Md.

Will be opened during May, 1889. On May 7th, at 11 o'clock A. M., appropriate addresses will be delivered in the Main Building. On May 8th, the buildings will be opened for inspection to invited quests from Maryland and Wash-

ington city, medical students, ministers, eic. On May 9th and 10th, the public generally will be admitted on cards to visit the Hospital. On May 11th, the faculties of the various educational institutions of Baltimore will be admitted. On Monday, May 13th, at 10 A. M., the Dispensary will be opened for the treatment of out-door patients. The Hospital will be opened soon afterwards for patients sent to it by the head of the Dispensary. Persons who wish to receive treatment in the Hospital, at their own charge in whole or in part, may apply, by note or through their medical-adviser, to the Director or to the Chief Physician, after May 1, 1889. Entrance on Broadway, between Monument and Jefferson Sts.

The Philadelphia Medical Times and the Medical Examining Board of Virginia.

In the department of "Correspondence" in this issue will be found an official letter from the President of the Medical Examining Board of Virginia noticing an editorial in the Philadelphia Medical Times for February. It is surely unfortunate for that journal that it did not post itself as to the facts in the case before undertaking the rôle of abusive censorship. While the official denunciation of that editorial by the President of the Virginia Board may sound severe, we do not believe that any one fully acquainted with the facts could think his letter inexcusable, in view of that editorial which claims a circulation of about 13,000 or more copies. When any journal undertakes to attack the animus of the Medical Examining Board of Virginia, it assumes a rôle which reminds us of the line, "Fools rush in where angels fear to tread." The Virginia Board is composed of thirty-two members of the regular profession of the State, who are the unanimously chosen representatives of the Medical Society of Virginia, with its 700 members. As we presume that the Pennsylvania Medical Society represents the best element of the Pennsylvania profession, so we are sure that the Medical Society of Virginia represents the best element of the regular profession of its State.

Knowing, then, the material of the Virginia Board, it would be a gratuitous insult of the basest character, which would recoil with a verity of debasement upon the accuser who insists that the attention of the Board "has been repeatedly called to the matter," when the Board asserts that it has received no communication on the subject. The assertion of the Board on any such matter is an evidence of the

truth.

There is, of course, no objection to any just or well-intended criticism upon the system or manner of the Virginia Board in making out its registry of applicants for examination, etc. Advice or criticisms would receive due consideration, when courteously extended, as soon as the attention of the Board was called to the matter. We candidly confess that we knew so well the intent of the manner of record. and had become so familiar with the system of the Board in compiling its tables of colleges represented, number of graduates examined, etc., that we had entirely overlooked the fact that these tables could be misunderstood; and surely no one can accuse us of being hostile to the interests of a college whose advertisement we have solicited in years past and published. The editorial in question goes far out of its way of legitimate criticism in asserting that "The only explanation we can give | why the figures are put down as they are in the Official Reports of the Virginia Board with reference to the only one graduate of the Medico-Chirurgical College of Philadelphia out of about 225 graduates of other colleges that have been examined by the said Board is that the Board has been manipulated by parties who are hostile to this College." We doubt very much that there is any ground for supposing that there is even one Virginia doctor who is hostile to that college in any sense of the term.

We regret to see the animus displayed in the March 1st issue of the *Times* in its editorial on the "Virginia Board." The assertion that "The Medical College of Virginia * *

* * dared not openly oppose the Board," looks a little singular by the side of the fact that, during the recent session of the Medical Society of Virginia, when the subject of nominations for membership of the Board for the four years beginning January 1st, 1889, was under consideration, the Dean of the Faculty of that College stated that he but voiced the wishes of his Faculty in nominating or seconding the nominations of the members of the old Board as a whole to compose the new Board. In view of the fact that the Medical College of Virginia "openly" nominated or seconded the nominations of the old Board (whose term of office was about to expire) to compose the new (four years' term) Board, it would seem to be a very decidedly backhanded lick on the Faculty of that College to accuse it of not daring to "openly oppose the Board."

The allusions to a writer in the Register who charges that "the examinations are conducted in the interest of the Virginia medical schools" if it proved anything, would prove

to those acquainted with the facts that the writer does not know what he is talking about. The writer whose name is mentioned is not even a member of the Medical Society of Virginia; and it is not probable he ever became familiar with the endeavors of that body of representatives of Virginia doctors with regard to this matter of which he is said to have written. The suggestion that was made by some connected with the Medical College of Virginia, during the last session of the Virginia Legislature, to exempt graduates of the Virginia colleges from examinations by the Board. met with so little favor at the hands of the members of the Board, and of the profession of the State at large, that the strongest kinds of appeals came from nearly every member of the Board all over the State, to their friends in the Legislature, not to make any shadow of exemption of graduates of Virginia schools from the operations of the law; for it was claimed as a right for graduates of the Virginia schools, that they should have the privilege of testing their ability to stand examinations by the Board as well as the graduates of other colleges. It is the pride of Virginia graduates that the rightful possession of their diplomas attests the thoroughness of their education and fits them for favorable competition with graduates of the schools of other States, whenever competitive examinations as tests of merit are to be held. Hence it is that, in proportion to the number of graduates annually sent out from the Medical Colleges of the United States, there are relatively so many medical officers in the Army and Navy who are graduates of one or the other of the Virginia colleges.

The insinuation for another purpose than to commend it that the University of Virginia has a "primary school" feature in its system of medical education, tells so plainly of the ignorance of the system really adopted by that school, that it seems good advice to advise the critic to learn something of it before undertaking to ridicule it. The University of Virginia has long since adopted the view that primary training is an essential to a thorough education, and that a medical education sufficient for graduation from that institution involves familiarity enough with those principles of medicine which distinguish an educated doctor. There is nothing in its teachings which advises its graduates not to add the benefits of clinical study and observation to their didactic learning. On the contrary, such clinical study and obser-

vation are advised to be sought.

We would feel that we had accomplished a good, if we have impressed the truth that opposition to the examina-

tions by the Virginia Board comes from those who are not qualified to pass them—not from the majority of graduates of respectable schools who have passed them. We wish also to instruct our contemporaries that the system of examinations by the Virginia Board, does not permit examiners to know whose papers they are examining. As to some of the details of this system, we refer to the editorial announcement of the next session of the Board, which is published in this issue. We deny for the Board that there is on their part the slightest hositlity towards any worthy college in the country. A large majority of the Board are graduates of other reputable colleges than either of the Virginia schools; and hence there is no partiality on the part of the controlling elements of the Board for graduates of the Virginia colleges. We believe it to be the unanimous sentiment of the Board, as it is by far the majority wish of the Medical Society of Virginia, (whose creature the Board is). that no exemption whatever from the operations of the law be made in favor of Virginia graduates:

Notes on Some Southern State Societies to Convene during April, in 1889.

The next annual meeting of the Medical Association of the State of Alabama will convene in Mobile, midday of Tuesday, April 9th, and continue four days. Dr. M. C. Baldridge, of Huntsville, President, and Dr. Thomas A. Means, of Montgomery, Secretary. This is, perhaps, the most perfectly organized Medical Association in the United States. There is a County Medical Society in each county of the State, and each Society has its duly elected Board of Censors, before which Board every applicant for practice in that county (who does not present a certificate of previous examination by some other County Board of Alabama) must pass a satisfactory examination before he can procure a license to practice in that county. In each county there is also a Health Officer chosen by the Society, who is under the direction practically of the State Health Officer-Dr. Jerome Cochran, of Montgomery, being the present incumbent. The State appropriates annually \$3000 to office of the State Health Officer—his salary being \$1800. All of these organizations are practically the creatures of the Medical Association of the State of Alabama, and are amenable to its laws, and have to make annual reports to it. This Association is so thoroughly organized that its Roll of Counties contains the name, postoffice, date, and college of

63

graduation of every practitioner in the State, or, if not a graduate, when by what County Board he was examined and granted certificate to practice—whether he is a member of the County Society or not. The Association is composed of 100 Counsellors, Delegates from each of the County Societies, and the County Health Officers. The funds of the Association are realized by \$10 from each Counsellor, \$5 from each Delegate in attendance, and dues from each County Medical Society. Excellent statute laws protect the interests of the Association. In a word, the entire Association possesses features which forcibly remind one of a military organization—the President being commander-in-chief; the Vice-Presidents, lieutenant-generals: and the Presidents of the County Societies, the colonels of regiments.

The schedule for the session next month calls for a report by Dr. B. J. Baldwin, of Montgomery, on "Eye Diseases among Negroes;" one on "Electricity in Gynæcology," by Dr. Wm. E. B. Davis, of Birmingham; "Eclampsia Gravidarum," by Dr. R. M. Fletcher, of Madison; "Curability and Treatment of Pulmonary Phthisis," by Dr. V. P. Gaines, of Mobile; "Fever-Its Etiology and its Relation to Increased Temperature," by Dr. T. J. Johnson, of Decatur; "Diagnosis and Treatment of Uterine Displacements," by Dr. Thos. J. Lee, of Childersburg; "Cerebro-Spinal Meningitis," by Dr. Wm. M. Price, of Florence; "Dysmenorrhœa-Its Causes and Treatment," by Dr. Edward P. Riggs, of Birmingham; and "Dentition," by Dr. Wm. Camp Wheeler, of Cherokee.

The twenty-second annual session of the Mississippi State Medical Association will be held in Jackson, beginning Wednesday, April 17th. Dr. L. Sexton, of Wesson, President, and Dr. W. E. Todd, of Jackson, Secretary. The Board of Medical Censors, it seems from the report of last year, did not exercise sufficient care in the examination of applicants for license to practice medicine. Hence a resolution was adopted urging the Board "to use the closest scrutiny and" care in this particular, in the interest and for the protection of the people." In the list of papers on "special medical" topics," announced for the approaching session, we find the following: "Thermogenesis of Fever," by Dr. W. A. Evans, of Aberdeen; "Malarial Hæmaturia," by Dr. H. S. Gully, of Meridian; "Summer Diarrhæa of Children," by Dr. W. A. White, of Brandon; "Intubation of Laryn," by Dr. S. V. D. Hill, of Macon; "Puerperal Septicæmia," by Dr. B. F. Duke, of Como; "Trachelorrhaphy," by Dr. P. W. Rowland, of Coffeeville; "The Incubator—Mode of Using, etc.,"

by J. H. Blanks, of Meridian; "Syphilis," by Dr. J. C. Hall, of Auguilla; "Antagonism of Therapeutic Agents," by Dr. V. A. Vaughan, of Columbus; "Mode and Management of Insane Asylums," by Dr. T. J. Mitchell, of Jackson; "Epidemic Dysentery," by Dr. J. L. McLean, of Winona; "Puerperal Eclampsia," by Dr. O. B. Quin, of McComb City; "Peri-Uterine Cellulitis," by Dr. F. B. Nimocks, of Lawrence; "Placenta Prævia," by Dr. T. W. Fullilove, of Vaiden; "When is the Induction of Abortion Justifiable?" by Dr. E. L. McGehee, of Woodville. A number of other papers are promised, but their titles are not given. Such a programme gives excellent promise for a

most interesting and profitable session.

The thirty-ninth annual session of the South Carolina: Medical Association will be held in Charleston, beginning Wednesday, April 10th. Dr. C. R. Taber, of Orangeburg, President, and Dr. W. Peyre Porcher, of Charleston, Recording Secretary. The annual dues per member are \$3, and the names of those members over two years in arrears are dropped from the roll. The Board of State Medical Examiners, consisting of five members, appointed by the Governor, was organized March 5th, 1888-Dr. A. N. Talley, of Columbia, being Chairman, and Dr. J. C. Willcox, of Darlington, Secretary and Treasurer. "It is not within the power of the Board to require South Carolina graduates to undergo examination," which the Board very justly think unfair, so far as other institutions are concerned. This Association, in its corporate capacity, together with the Attorney-General and Comptroller-General of the State, constitute the "Board of Health for the State of South Carolina." The Board has an annual appropriation from the State of \$2,000. The Association is represented by an Executive Committee of seven members, of which Dr. P. A. Wilhite; of Anderson, is present Chairman. The total permanent membership of the Association on adjournment of the Session of 1888 was 166 members. The Reporters appointed for 1889 are: Dr. T. G. Croft, of Aiken, on Epidemics; Dr. J. W. Hill, of Edgefield, on Obstetrics; Dr. F. L. Parker, of Charleston, on Ophthalmology; Dr. E. Barnwell Rhett, of Charleston, on Surgery; and Dr. J. W. Moore, of Spartanburg, on Practice of Medicine.

The eleventh annual session of the Louisiana State Medical Society will meet in New Orleans on Tuesday, April 9th. Dr. I. J. Newton, of Bastrop, President, and Dr. P. B. McCutchon, of New Orleans, Secretary. The Administrators of the University of Louisiana and Agricultural and

Mechanical College, at Baton Rouge, gives the use of one of their buildings for the meetings of this State Society for a term of ninety-nine years, whenever it chooses to meet there, and also as a depository for books, etc. The Louisiana Society adopted last year a good rule with reference to reports on advances in the several departments of medical science. In brief, it is as follows: To each Section, representing a department of medicine, a chairman is appointed. whose duty is not only to do all he can himself in the way of research and report, but also to solicit essays, papers, reports, etc., appertaining to his Section, from all the members of the Society, to be sent to him, which are then compiled and prepared as a report of his Section. Thus, instead of a report on advances being the result of the work of one, it is made comprehensive and complete by all of the Society, speaking through the respective chairmen. This year, Dr. Joseph Jones, of New Orleans, is to report on "General Medicine; " Dr. R. H. Day, of Baton Rouge, on "Surgery;" Dr. F. J. Allen, of Shreveport, on "Obstetrics and Gynæ-cology;" Dr. T. Hebert, of New Iberia, on "Materia Medica and Therapeutics;" Dr. H. D. Bruns, of New Orleans, on "Ophthalmology and Otology;" Dr. J. W. Dupree, of Baton Rouge, on "Diseases of Children;" Dr. A. G. Friedrichs, of New Orleans, on "Dental and Oral Surgery;" Dr. H. W. Blanc, of New Orleans, on "Dermatology;" and Dr. S. E. Chaillé, on "Anatomy and Physiology." Louisiana is also trying to establish a State Board of Medical Examiners.

Typograpical.

In Dr. Wenzel's article, "Is Tuberculosis Hereditary?" in

February number, note the following corrections:

Page 800, 17th line from bottom, read vascular for "muscular;" page 800, 7th line from bottom, place semi-colon after feasible, and not after "based on;" page 801, 2d line from bottom, strike out "removes" after figure 4; page 803, 15th line from top, read Neurvetter for "Neuventter;" page 803, 14th line from bottom, read Pollocks for "Pollocki;" page 804, 6th line from top, insert on after the word "long;" page 805, 13th line from top, after word "animals," insert a dash (—); "page 806, 5th line from bottom, read scrofulous for "scrofula;" page 807, 15th line from top, after the word "tissue," insert a dash (—); page 808, 15th line from bottom, read Salamonsohn for "Salonvonsohn;" page 808, 7th line from bottom, read Aufrecht for "Aufreckt;" the same in line 5 from the bottom.

INDEX TO VOLUME XV.

APRIL, 1888-MARCH, 1889, inclusive,

EXPLANATIONS.—This Index is divided into two parts: First, Index of Contributors, which also gives the titles of articles, etc.; and, secondly, Index of Subjects.

Notices of books, colleges, journals, deaths, personals, and proceedings of societies, etc., are indexed in the Index of Subjects, under the respective words, Book Notices, Colleges, Journalistic, Obituary Record, Personals, and Society and Board Proceedings, etc.

INDEX OF CONTRIBUTORS

AND TITLES OF THEIR ARTICLES.

GEORGE BAYLES, M. D., Orange N. J. Criticism of Modern "Physical Culture"	
	783
E. J. BEALL, M. D., Fort Worth, Texas Dermoid Cysts of the Coccygeal Region,	708
HUGH BLAIR, Richmond, Va. Pyogenesis, 252; Surgical Kidney	527
T. M. BOWYER, M. D., Liberty, Va. Strangulated Hernia-Laparotomy-Manipu-	
lation of Gut-Recovery	317
C. W. P. Brock, M. D., Richmond, Va. Morphine and True Tetanus-Their Eti-	
ology	1
JOHN BBOWNRIGG, M. D., Columbus, Miss. Treatment of Fractures of the Forearm,	699
W. CHEATHAM, M. D., Louisville, Ky. Diseases of Nose and Pharynx, and Their	
Surgical Treatment	607
J. LEONARD CORNING, M. D., New York, N. Y. Address Delivered before the	
Alumni Association of the Long Island College Hospital, etc	15
D. M. Crosson, M. D., Lewisdale, S. C. Anomalous Duct of Exit from the Parotid	
Glands in Front of the Ear, 18; Antipyrin for Gonorrhœa and Dysen-	
	184
EUGENE L. CRUTCHFIELD, M. D., Baltimore Md. Case of Puerperal Fever without	
Evidence of Septicæmia-Remarks	231
EPHRAIM CUTTER, M. D., LL. D., New York, N. Y. Food versus Bacilli in Consump-	
tion, 614; Trophopathy in Heart Diseases (Opus 266)—A New Stand- point for Cardiac Affections (after Salisbury)	000
E. L. DETWILER, M. D., Herndon, Va. Membranous Croup and Diphtheria, 260;	000
Hour-glass Bladder, having Many Sacs, etc	844
FELLOW OF MEDICAL SOCIETY OF VIRGINIA. Value of Hypophosphites in the	011
Treatment of Phthisis Pulmonalis, Tuberculosis, Scrofula, Chronic	
Bronchitis, Neurasthenia, Anæmia, General Debility, etc	459
R. N. GARTHRIGHT, M. D., Poquoson, Va. Examine all Non-Graduates	
WILLIAM GOODELL, M. D., Philadelphia, Pa. (I.) Continuance of Menstruation af-	
ter Complete Removal of Both Ovaries; (II.) Fibroid Tumor of Uterus,	242
WILLIAM B. GRAY, M. D., Richmond, Va. Advances in Obstetrics and Gynæcology,	462
C. C. GREER, M. D., Roanoke, Va. Treatment of Typhoid Fever as Adopted in	
Fifty Cases, with only One Death	171
GEO. BYRD HARRISON, M. D., Washington, D. C. Typho-Malarial Fever	652
JOHN B HAWES, M. D., Washington, D. C Tait's Perineorrhaphy	248
M. D. Hoge, Jr., M. D., Richmond, Va. The Tongue in Health and Disease, 797;	
Translation from German	902
W. M. Holladay, A. B., M. D., Hampden-Sidney, Va. Phenacetine-Anti-febrile	
	640
JOSEPH FABER JOHNSON, M. D., Washington, D. C. Ovariotomy in a Lady 64 Years	040
Old-Tumor Weighed 63½ Pounds -Recovery	642

JOSEPH JONES, M. D., New Orleans, La. Cancer of Testicle, Mesentery, Stomach	
and Liver	381
WILLIAM J. JONES, M. D., Mushet, Va. Anal Fissure and Eczema	383
A. F. KERR, M. D., Williamsville, Va. Non-Puerperal Acute Metritis	11
CORNELIUS KOLLOCK, A. M., M. D., Cheraw, S. C. Abdominal Section and Removal	
	172
	810
	310
I. N. Love, M. D., St. Louis, Mo. Some Points in the Management of Typhoid	
Fever	87
G. Frank Lydston, M. D., Chicago, Ill. Lecture on Urethral Fever	687
FREDERIC S. MASON, New Orleans, La. Notes on Sandal Wood of India, 168;	
Quinine Salts-Their Solubility and Comparative Richness in Alkaloid.	258
JACOB MAY, M. D., Bridgeport, Conn. Case of Hystero-Epilepsy-Tait's Opera-	
tion-Cure	174
GEORGE E. MATTHEWS, M. D., Ringwood, N. C. Dr. Edward Warren-Bey	
Medicus. Dr. Rust on the Devil	122
HUNTER MCGUIRE, M. D., LL. D., Richmond, Va. Operative Treatment in Cases of	
Enlarged Prostate	445
WILLIAM EDWARD McGuire, M. D., Richmond, Va. Extra-Uterine Pregnancy-	
Removal of Dead Fœtus by Thermo-Cautery, etc	322
THOMAS J. MOORE, M. D., Richmond, Va. Advances in Gynæcology	
P. J. MURPHY, M. D., Washington, D. C. Intra-ligamentous (Broad Ligament)	
	170
Cyst Removed	212
Hugh T. Nelson, M. D., Charlottesville, Va. Medical Examining Board of Vir-	
ginia, and the "Philadelphia Medical Times"	897
WILLIAM PERRIN NICOLSON, M. D., Aflanta, Ga. Note on Use of Salol in the	
Treatment of Dysentery and Diarrhea	456
THOMAS M. NORTON, M. D., Washington, D. C. Frequency of Placenta Prævia-	
Sources of Iodine	181
R. L. PAGE, M. D., Batesville, Va. Eclampsia Occurring in the Seventh Month	
of Pregnancy-Recovery	813
WILLIAM W. PARKER, M. D., Richmond, Va. New Method of Protecting the Air	010
	040
Passages from Yellow Fever and Other Zymotic Diseases, etc	
R. A PATTERSON, M. D., Aurelian Springs, N. C. New Treatment of Diphtheria	467
ALBAN S. PAYNE, M. D., Markham, Va. Reduction of Strangulated Hernia by	
Ice Poultices, etc	389
LEWIS G. PEDIGO, M. D., (moved to) Roanoke, Va. Case of Atropia Poisoning Suc-	
cessfully Treated with Amyl Nitrite-With Remarks on Treatment	81
J. HARRIS PIERREPONT, M. D., Winter Haven, Florida	386
E. W. Row, M. D., Orange, Va. Traumatic Tetanus-Report of a Case-Recovery,	
PHILIP S. Roy, M. D., Washington, D. C. The Mental Condition Caused by Alcohol,	
	94
M. A. Rust, M. D., Richmond, Va. Etiology and Treatment of Tetanus, 9; Rise,	000
Decline and Fall of the Devil	633
R. M. SLAUGHTER, M. D., Theological Seminary, Va. Case of Very Large Child at	
Birth—Difficult Delivery of Hips, etc., 179; Ichthyol, 233; Translations	
from French	823
WILLIAM S. STOAKLEY, M. D., Bay View, Va. Salol, 384; Atypical Forms of Ty-	
phoid Fever	655
I. S. STONE, M. D., Lincoln, Va. Correspondence from Europe, 19, 102,	
T. O. SUMMERS, M. D., Jacksonville, Fla. Indications for Operative Interference	
in Cerebral Troubles	705
W. IRVING THAYER, D. D. S., M. D., Brooklyn, N. Y. Starch versus Dextrine	
W. D. TURNER, M. D., Fergusson's Wharf, Va. Massage for Constipation	004
EDWARD WARBEN-BEY, M. D., C. M., LL. D., Paris, France. Paris Correspondence,	
265, 815,	887
HENRY P WENZEL, M. D., Milwaukee, Wis. Is Tuberculosis Hereditary?800,	946
JOSEPH A. WHITE, M. D., Richmond, Va. Bloodless Resection of Tongue for Epi-	
thelioma, etc	98
J. W. WILLIAMS, M. D., Old Church, Va. Dr. Charles R. Cullen	
JOHN T. WILSON, M. D., Sherman, Texas. Surgical Procedures in Traumatic Epi-	
lepsy	
10hpl	

10	Amylene pyurate	010
A bdomen massaged for constipa-	Anal (see also Rectum) dilatation,	
tion, 21; Wounded -, 749; Death	Value of, 426; — eczema and fis-	
nine months after gunshot wound	sure obstinate	883
of — 498	Analgesin. See Antipyrin.	
Abdominal section (see also Lapa-	Anæmia, true and false	726
rotomy) for mesenteric tumor, 172;	Anæsthesia by cocaine for tongue	
Paroxysmal — pulsation	resection	98
Abortion, How to produce, 56;	Anæsthetics, see Chloroform, also	
Treatment of -, 208; Causes and	Cocaine, also Ether; Choice of -,	151
treatment of -, 359; Electricity	Anatomy, double, Case of	510
for -, 463	Ancient remedies	16
Abscess of perineum, 50; Perine-	Aneurism, Potassium iodide for,	
phritic -, 208, 346; Psoas -, see	212; Aortic - cured by ligating.	741
Psoas abscess; Trephine for — of	Angina pectoris, Antipyrin for	185
brain 706	Ankle carious	45
Acetanilide. See Antifebrin.	Antifebrile, Phacetine	640
Acid Bursinic, see Bursinic acid;	Antifebrin (see Acetanilide), 356,	030
Hydrochloric —, see Hydrochlo-	576; Temperature effects in axilla	
ric acid; Muriatic —, see Muri-	and rectum of —, 42; Action of	105
atic acid; Hydriodic -, see Hy-		185
driodic acid; Carbolic —, see	Auti-neuralgic, Phenacetine	
Carbolic acid; Hydrocyanic —,	Antipyretics and fever	665
see Hydrocyanic acid.	Antipyrin, 218, 356, 576; — hæmos-	
Acne, Ichthyol for 236	tatic, 35; — effects temperature	
Actinomycosis 148	in axilla and rectum, 42; - for	
Advertisements, Arkansas Society	excessive feetal motion and ute-	
on quack 226	rine neuralgia, 63; — for gonor-	
Alabama law, Medical Examiners. 220	rhœa, dysentery, etc., 184; — for	
Albuminuria of pregnancy 463	migraine, 269; — and sweet spirits	
Alcohol for typhoid fever 24	of nitre dangerous, 373; — anæs-	
Alcoholism (see also Dipsomania),	thetic, 463; - hypodermically,	
Mental condition of 94	657; — and cocaine combined for	
Aletris cordial for menorrhoea, etc 52	hypodermic use, 895; — for labor	
Alexander's operation 149	pains	895
Alimentation. See Food.	Antiseptic midwitery, 60; -pills of	
Alkaloids of cod-liver oil	Warner & Co., 302; — solution	
Alum and iron mass, 603;	for laparotomy, 342; China grass	
for anal eczema and fis-	-, 429; - surgery for country	
sure 833	doctors, 733; Aphorisms of -	
Alvine. See Bowels.		740
Amblyopia, Tobacco, 422; - due	Antiseptics, 213; - in bowel dis-	
to menstrual suppression 847	eases, 64; in diphtheria, 188; -	
Amenorrhœa due to amblyopia 847	for surgeon's wound, 392; — in	
Ammonia treatment of typhoid fe-	midwifery	465
ver 548	Aortic arch, Surgical branches, 29;	
Amyl nitrite for atropia poisoning,	- aneurism cured by ligating	741
81; —— and prussic acid antag-	Apostollis electrolysis of uterine fi-	
onistic 577	br o ids	162
0 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2.4	

Arkansas Society on quack adver-	Charcot, Clinical Lectures on Certain Dis-
tisements 226	eases of the Nervous System
Arm. See Forearm.	
Arrested development of forearm 39	Clark, Lectures on Diseases of the Heart 6
Arsenic, Large, non-fatal dose of 844	Corning, Treatise on Headaches and Neu- ralgia, including Spinal Irritation, and a
	rallia, including Spinal Irritation, and a
	Disquisition on Normal and Morbid Sleep. 93
Arthritis, Tubercular 392	Sleep
Aseptic surgery and gynæcology,	Operations 22
aphorisms 740	Operations
Aspiration for empyema 747	istry
Asthma, Hydrogen peroxide for re-	Morphologies of the Blood, Urine, Foods,
flex 59	Water, etc
Athletic sports, Criticism of 783	Water, etc
Atropia (see Belladonna) for opium	and Premature Baldness in the United
	States 15 Dulles, Accidents and Emergencies 22
narcosis. 32; — for syncope, 50;	Dulles, Accidents and Emergencies 22 Elmer, Physician's Hand-book for 1889 85
Amyl nitrite for - poisoning, 81;	English Compilers. Year-book of Treat-
— in opium poisoning 189	ment for 1887. 22 Evans, Hand-book of Historical and Geo- graphical Phthisiology. 8 Flint, Text-book of Human Physiology 67
Atrophy, Unilateral facial 215	Evans, Hand-book of Historical and Geo-
Atypical forms of typhoid fever —	graphical Phthisiology
545 655	Flint, Text-book of Human Physiology 67 Foster, Illustrated Encyclopædic Medical
Auditory canal, Boils of external,	Dictionary, Vol. I
150; — meatus, see Ear.	Garland, Modern Treatment of Pleurisy
Autopsy, How to make 274	and Pneumonia 10
Axillary artery, Surgical branch 29	Gerster, Rules of Aseptic and Antiseptic
many actory, butgical braded	Goodwin, Freatment of Diseases of Women,
D	Puerperal and Non-Puerperal 67
K	Gouley, Diseases of Man-Data of their
Dacilli in consumption, Food ver-	Nomenclature, Classification and Gene-
8us 614	sis
Bacillus of tetanus found 724	Floor 22
Bacteria of typhoid fever 555	Hamilton, Modern Treatment of Head-
Bacteriological discovery, Tetanus. 724	aches
Bear Lithia Water 602	ment of Diseases of Women
Belladonna. See Atropia.	Howe, Excessive Venery, Masturbation and
Bichloride of mercury. See Corro-	Continence 51
sive sublimate	Continence
Birth, Size of hips retarding 143, 179	Authors
	Skin
Bladder neck inflamed, see Cysti-	Skin
tis; — neuralgia, 263; Perforat-	Brain Tumor, and some other Cases of
ing ulcer of -, 344; New treat-	Nervous Disease
ment of ulcerated -, 582; Hour-	Keyes, Surgical Diseases of Urino-genital
glass -, 644; -everted into va-	Organs, including Syphilis 36
gina and pregnancy, 670; Cysto-	Organs, including Syphilis
scopic explorations of -, 754	Liebermeister, Pathology and Treatment of
Blood, Leucocythæmia cancer of,	Infectious Diseases
328; Fourth morphology in -, 578	peutics 59
Board sessions. See Societies,	Love La Mort par la Decapitation 84
Boards, etc.	Mann, System of Gynæcology by American Authors, Vol. II.
Boils of ear canal 150	can Authors, Vol. II
Bone diseases, Exploring needle	Mays, Theine in the Treatment of Neural-
for diseases, Exploring needle	Morrow, Atlas of Venereal and Skin Dis-
for 507	eases
TO I BY ALL	Otis, Diseases of the Male Urethra 43
Book Notices:	Palmer, Favorite Prescriptions of Distin- guished Practitioners, with Notes on
American Pharmaceutical Association, Na-	Treatment
tional Formulary of Unofficial Prescrip-	I with this I allow S New Cook-booking.
Reard_Rockwell, Practical Treatise on Nor-	Paune Manual of General Pathology 31
vous Exhaustion (Neurasthenia) 854	cians, Mothers and Nurses 67
Beaumetz, Modern Treatment of Diseases of	Ranney, Applied Anatomy of Nervous Sys-
vous Exhaustion (Neurasthenia)	tem
Diowis, medical Diagnosis 010	Sciences 43
Buck, Reference Hand-book of the Medical	Sciences Salisbury, Relation of Alimentation and
Sciences	Disease
Campoen, Language of Medicine 155	

Seiler, Hand-book of Diagnosis and Treat- ment of Diseases of the Throat, Nose	gastric —, 146; — of stomach
and Naso-pharynx	diagnosed, 204; Clavicular gland
and Naso-pharynx	enlarged in — of cervix uteri, 207;
Shoemaker, Practical Treatise on Diseases	Leucocythæmia — of blood, 328;
of the Skin	Chlorohydria in — of stomach,
Stillman The Life Insurance Examiner 677	329; Chian turpentine for —,
Stillman, The Life Insurance Examiner 677 Stillman, Treatise on Dislocations 366	363; Emperor Frederick's - of
Surgeon General U. S. Army, Index Cata-	throat, 377; - of testicle and ab-
logue of Surgeon-General's Office 676	dominal viscera, 381; - of larynx,
Pelvic Hæmatocele	397, 481; Diagnosis of kidney,
Taylor, Clinical Atlas of Venereal and Skin	479; Treatment of of larynx,
Diseases, including Diagnosis, Prognosis	533; Duty of doctor to patient
and Treatment	with -, 585; Vaginal hysterec-
the Putrefactive and Physiological Alka-	tomy for — of uterus, 751; Zinc
loids 437	chloride for —, etc
Warren, Medical Publications, Harvard	Cannon-ball massage for constipa-
Medical School	. 01
Witthaus, Essentials of Chemistry and Toxi-	
cology. 68 Wood's Medical and Surgical Monographs, Vol. I 850 Woody, Essentials of Medical Chemistry and Urinalysis 221	Cantharidal eruption used by malin-
Wood's Medical and Surgical Monographs,	gerer 386
Woody Essentials of Medical Chemistry	Capillary bronchitis 279
and Urinalysis 221	Capital punishment by electricity 380
Wyman, Abdominal Surgery 435	Capon Springs and Baths 375
	Carbolic acid for typhoid fever 348
Bowel fluxes of infants, 67; Anti-	Cardiac. See Heart.
septics in — diseases 64	Caries of ankle, Treatment 45 Carotid artery, Surgical branches;
Bowels obstructed (see also Her-	Carotid artery, Surgical branches;
nia) 58	29; - ligated to cure aortic
Brachial artery, Surgical branch 29	aneurism 741
Brain, Dual, 39; Hypertrophy of	Cascara sagrada, Tasteless, 46; Se-
-, 61; - matter lost, and re-	vere effects of — —, 49; — — in
covery 408; When to trephine for	constipation 423
— diseases, 705; — surgery 744	Catarrh caused by constipation, 847;
Breast, see Mammæ; — inflamed,	Nasal -, 607, 668; Hydrogen
see Mastitis.	peroxide for nasal -, 59
Bright's disease, Pathogenesis of 26	Catarrhal fever of Texas 414
Broad ligament. Cyst of, 472; — and	Cellulitia Pelvic 732
utero-sacral ligaments shortened. 149	Cephalagia, Trephine for 706
Bromine Arsenic Springs 781	Cerebral troubles, see Brain dis-
Bronchitis, Capillary, 279; Hypo-	eases; — integrity 762
phosphites for chronic -, 459	Cerebro-spinal meningitis, Chloro-
Bronchotomy in croup 31	form for 672
Buffalo Lithia Springs, 77;	Cervix uteri lacerated, Effects of,
Water in lithæmia, 524;	161; Clavicular gland enlarged in
Water solvent for uric scid 661	cancer of ——, 207
Bunion resected 216	Chancre â distance 202
Burns, Ichthyol for 236	Charffereths dangerous 815
Bursa pastoris, Styptic 828	Chemistry, Advances in 575
Bursinic acid, Styptic 828	Chian turpentine for cancer 363
Darbinic dota, Objetion	Child at birth. See Fætus.
	Children's diseases 589
esarean operation, see Laparo-	China-grass antiseptic 429
tomy, and also Sænger; — sec-	
tion 167: Case of section 403:	Chloral hydrate or morphia — 481
tion, 167; Case of — section, 493; Abuse of — section	When?
Calculi, Odd nuclei for	ride.
Calculus, Contracted meatus giving	Chloroform mortality, 369; Infor-
symptoms like, 50; Vesical and	mation wanted on — deaths, 325;
Urethral —, 407; Buffalo Lithia	- in obstetrics, 462; for cere-
Water for uric acid —, 661	bro spinal meningitis 672
Calisthenics Abuse of 793	Chlorohydria, Hyper-, in stomach
Calomel is cholagogue 409	Chalana infrantisca 240, 664 a Alaha
Cancer of rectum, 51; Diagnosis of	Cholera infantum, 349, 664; Apho-

risms in, 353; Treatment	Coronary artery, Superior, com-	
of — —, 412, 501; Diet treatment		669
of ——, 430	Corrosive sublimate in corneal dis-	
Chorea due to nasal disease 140	eases	502
Cigarette smoking 74	Corset, Wire-woven, for spinal dis-	
Cinchona salts, Comparative values, 258	eases	574
Circumflex artery, Surgical branch. 29	Cramps, Nerve pressure for	904
Clavicular gland enlarged in cancer	Cranial surgery	
of cervix uteri	Craniotomy, Laparotomy versus	
Club-foot. See Talipes.	Cranium, When to trephine the	
Coagulation, Theory of blood 578	Cremation of garbage, Furnace for.	
Cocaine, 356; — for cervical dilata-	Creosote in consumption	
		020
tion, 38; — and hygiene, 66; — anæsthesia for tongue resection,	Croup, Membranous (see also Diph-	91
	theria), Bronchotomy for	oT
98; Toxic effects of —, 281; —	Curvature of spine. See Spinal curvature.	
poisoning, 359; Bad effects of —,		
364; Effect of — on brain, 423;	Cyst of labium removed, 50; Renal	
Best -, 431; - saccharinate, 576;	- fatal, 45; - of broad ligament,	
Chronic — poisoning, 725; — and	472; Gas —, 481; Dermoid — of	700
antipyrin combined for hypoder-	coccygeal region	
mic use	Cystitis	
Coccygeal region, Dermoid cyst of. 708	Cystoscopic explorations	
Cod-liver oil, Lipanin substitute for,	Cystotomy, Supra-pubic	067
264; Alkaloids of — -,	2	
Coffee in typhoid fever 350	l land manuscription	010
Callagas etc.	Dead pronunciation	612
Colleges, etc:	Dengue, Tongaline in	302
Barringer's (Dr.) Preparatory Medical School	Depopulate during epidemics, When	000
School	Damaid and of an analysis	908
Opening 939 Jefferson Medical College 376	Dermoid cyst of coccygeal region, 708; Case of — —,	407
Jefferson Medical College	David Disc and fall of the coo.	497
New York Post Graduate Medical School and Hospital	Devil, Rise and fall of the, 633;	×00
and Hospital	Note on article about the -,	722
New York Polyclinic	Dextrine versus Starch	313
South Carolina, Medical College of	Diabetes (see also Polyuria), Anti-	010
Texas Medical College 380	pyrin for, 185, 895; — mellitus	216
South Carolina, Medical College of 379 Texas Medical College 380 Virginia, Medical College of 79, 778 Virginia, University of 38, 373	Diagnosis of stomach diseases, 145;	900
Virginia, University of	Expediency in —,	200
Colon perforated by psoas abscess, 416	Diarrhœa, Endemic of. 341; Treat-	
Conception. See Pregnancy.	ment etc., of —, 345; Salol for	400
Condensed milk, Manufacturer of 856	-, 456; Tale for	488
Conjunctivitis, Chronic granular, see		831
Trachoma: Treatment of 60	Dietetics in typhoid fever	506
Trachoma; Treatment of -, 60 Constipation, Massage with cannon	Digitalis in typhoid fever, 25; —for	
ball for, 21; Glycerine for —, 215	opium narcosis, 32; — diuretic,	
432; Cascara for —, 423; Causes,	189; — in large doses for pneu-	650
results and treatment of -, 504;	monia	
Massage for -, +54; - causes		499
catarrh 847	Diphtheria, Hydrogen peroxide for,	
Consultations, French	59; New treatment of —, 107, 467; Antiseptics in —, 188; —	
Consumption (see also Tuberculosis),	and croup, 260; Treatment of —,	
Prevention of, 522; Creosote in	330, 825; Microbe of —	809
—, 829; Hypophosphites for —,	Dipsomania, Case of	
459; Vocal music to prevent —,	Disinfectant, Hydrogen peroxide	49
586; Food versus bacilli in —, 614;	Disinfection in epidemics	
- infection 724	Dislocation of humerus	
Convulsions (see Eclampsia). Puer-	Dispensatory, New edition	
peral, at seventh month	Diuretic, Digitalis	180
Corneal diseases, Corrosive subli-	Doctors. Moses and other	549
mate for 502	Drachm sign	219
Corns, Treatment of 659	Drachm-grain prescription	508
,	1 2 though State property brothers	000

Dropsy due to emptying empyema			669
Duchenne, Monument to	887	Epithelioma of tongue resected, 98;	
Dysentery, 209; Treatment of —,	1	- of larynx	
36, 358; Ipecac and ice water	-	Ergot, Normal liquid	429
enemata for -, 63; Antipyrin for		Erysipelas and puerperal fever, 187;	
_, 184; Salol in _, 456; _ of	001	- for tumors, 725; Treatment of	
infants	664	-, 820, 904; Heat in -, 830; -	
Dysmenorrhœa, Cocaine for cervi-			903
cal dilatation in, 38; Dilatation			423
for —,	499	Evolution, Spontaneous	143
Dyspepsia (see also Indigestion).		Examine all non-graduates	
Diagnosis of, 146; Prescription		Excision of inferior maxilla,	35
for —,	27	Excresences, Treatment of	
-	1	Exophthalmic goitre, Antipyrin for,	
F		Expert testimony, Medical	
Lar, Boils of external, 150; Mid-		Exploring needle for bone diseases,	507
dle - suppuration, 209; Bullet		Extra-uterine pregnancy, 219; Elec-	
in —,		trolysis for — —, 164; Laparo-	
Echinococcus of liver, Recovery	828	tomy for — —,	465
Eclampsia, Rapid delivery in, 154;		Eye (see Iritis and also Corneal)	
Cases of puerperal —, 413; Vera-		muscles paralyzed, 504; Curious	
trum in pue peral -, 431, 508;		— cases in negroes	421
Puerperal — at seventh month,	813	Eye-glasses, When to use	667
Eczema diagnosed from psoriasis,		Eyes, Weak. See Sight defective.	
40; Indian Springs for -, 151;			
Nature and treatment of -, 197;		C	
Treatment of — of face, 656; —		l'acial neuralgia, see Neuralgia,	
of anus	883	Facial; Unilateral — atrophy	215
Education demanded, 341, 343;		Fainting. See Syncope.	
Medical - in the United States,		Fat mammæ, To prevent	824
227; Principles of —,	668	Fecundation, Artificial human	893
Elbow exsected, Langenbeck	46	Fees, Professional	270
Electricity for uterine fibroids, 162;		Female double anatomy	510
- for extra-uterine pregnancy,		Femoral artery, Surgical branch	30
164, 463: Capital punishment by		Femur fractured, Compound, 750;	
	380	Appliance for fracture of -,	198
Electro-cystoscopy	756	Fever, see Pyrexia, also Hyperpy-	
Electrolysis for stricture, 347; -		rexia; Typhoid —, see Typhoid	
for hypertrophied prostate, 361;		fever; Puerperal — see Puerpe	
- no good for enlarged prostate.		ral fever; Catarrhal —, see Ca-	
566; — for urethral stricture,		tarrhal fever; Typho-malarial -,	
763; - for sequelæ of gonor-		see Typho-malarial fever; Ure-	
rhœa	769	thral —, see Urethral fever; Society —, see Society fever; —	
Embalming, Method of	902	ciety -, see Society fever; -	
Embolism (see also Heart-clot) after		ptomaines, 917; — and antipy-	
labor, 143; — due to bad food		retics	665
Emperor Frederick's case, 377;		Fibræmia	867
Autopsy of,		Fibrinous concretions due to bad	
Emphysema of mediastinum		food	868
Emphysematous kolpitis.		Fibroid of uterus, 247; Treatment of	į.
Empyema and dropsy, 667; Aspira-		, 162, 737; Epicystotomy for	
tion for —,			753
Encephaphaloid of larynx		Fibroma of laryux	
Enema, New tube for		Fissure of anus, Obstinate	
Enterotomy	276	Fistula, Rare case of vesico-vagi-	
Epicystotomy for uterine tumor, 753	, 754	nal	670
Epidemics, What to do during		Florida epidemic, Yellow fever, 580;	00.
Epigastric artery, surgical branch.		- quarantine law	834
Epilepsy, Hystero, see Hystero		Feetal motions excessive, Antipyrin	0.0
Epitepsy; Trephine for -, 707;		for	63
Surgery for —,	715	Fœtus, Sizes of, etc., 56; Large	
Epistaxis, Compress superior coro-		size and weight of143,	179

Food versus bacilli in consumption,	Hamamelis for hæmorrhage 53
614; Reed & Carnrick's Soluble	Hammer beats, Trip 88
-, 591; Bad, - causes heart-	Hand splints, Metallic 68
clot 86	
Forceps, Spoon-handle obstetrics,	Hayden's virburnum compound 37
346; Frequency of need of 66	
Forearm, Development arrested,	Heart (see also Pericardium) dis-
39; Metallic — splints, 681;	eases, New view of, 863; — pa-
Treatment of fractured —, 699;	ralysis, 345; — murmurs, 350; Idiopathic — hypertrophy, 724;
Treatment of ununited fracture	Mills diet in diesers
of -, 93 Foxglove. See Digitalis.	Milk diet in — diseases 83
Fracture of humerus from muscular	Heart-clot after labor, 143; ——
	due to bad food 86
action, 64; New splint for — of femur, 198; — of skull, 408; —	Hernia (see also Bowels obstructed),
of humerus, 408; Treatment of	Case of strangulated, 317; — re-
- of forearm, 699, 930; Gunshot	duced by ice, etc., 389; Radical cure of — 499
-, 747, 748; Gunshot — of hip-	Herniotomy 270
joint, 810: Easy — of neck, 844;	Higrine and cocaine 66
Plaster-of-Paris treatment of -, 92	
Fractured neck not fatal 431	
Furuncles (see Boils), Ichthyol for, 237	
2 42 41 61 62 6 20 10 10 17 10 17 10 17 10 17	History of medicine 542
C	Horse diseases, Chart of 598
Tarbage, cremated, Furnace for, 911	
Gas cyst or kolpitis 481	
Gastralgia, Prescription for 27	
Genito urinary reflexes 272	action, 64; — and dislocated, 408
Germ theory not universal 217	Hydriodic acid 277
Germs and infection, Pathogenic 578	Hydrocephalus and hypertrophied
Germicide, Hydrogen peroxide 49	
Germicides 650	
Gland, Parotid, anomalous, 18;	of stomach 206
Clavicular — enlarged in cancer	Hydrocianic acid and amyl nitrite
of cervix uteri 207	antagonistic 577
Glasses. See Eye glasses.	Hydrogen peroxide, 58; — — ger-
Glucine-vanilline, Phloro-, for gas-	Hudnelutidine 497
trie diagnosis, 145; — in	Hydrolutidine
stomach diseases	proved 820
Goitre, exophthalmic, Antipyrin for, 895	Hylander's sugar test 404
Gonorrhea, Antipyrin for, 184;	Hymens, Shapes of 215
Abortive treatment of —, 505;	Hypermetrope 667
Electrolysis for — of prostate 769	Hyperpyrexia remarkable in mala-
Grass, China, antiseptic 429	rial tever 340
Gymnasium, Criticism of 783	Hypertrichiosis 65
Gynæcology, Advances in, 153, 161;	Hypertrophy of heart, Idiopathic,
Report on -, 588; Aseptic and	724; Treatment of - of prostate, 766
antiseptic aphorisms of -, 740	Hypnotism (see also Mind-cure),
	338; — and menstruation 263
Н	Hypodermically, Antipyrin 657
1 1 æmatocele, Case of pelvic 66	Hypophosphites in wasting diseases,
Hæmaturia, Malarial, 197; Quinine	459; — of lime and soda for
in malarial — 216	uterine tumors
Hæmoptysis, Iodoform for 403	Hysterectomy, vaginal, for cancer, 751 Hysteria 348
Hæmorrhage from palm arrested, 362; — from lungs, see Hæmop	Hysteria
tysis; Hamamelis for — 539	ease, 140; Tait's operation for —, 174
Hæmorrhoids, Treatment of, 48;	the state of the s
painlessly removed, 358; Dilata-	T
tion for — 427	Lee poultice to reduce hernia 389
Hæmostatic, Antipyrin 35	Ichthyol, History and uses of, 233;

— for toothache 239	cancer, 479; Surgical -, 527, 564;
Iliac artery, Surgical branch 30	- excised, see Nephectomy.
Indiana, Opium prescriptions in 442	Kolpitis emphysematous 481
Indigestion. See Dyspepsia.	-
Infants, Alvine fluxes of	shium mains removed Cust of 50
Infection, Tubercular, 263; Pathogenic germs and — 573	Labor, Premature, see Abortion;
Ingluvin for vomiting of pregnancy, 936	— prolonged and difficult, 143,
Innominate artery, Surgical branch 29	179; Forceps —, 665; Antipyrin
Insane, Sulfonal for, 725; Manage-	for — pains 895
ment of — in Texas199, 507	Lacerated cervix uteri, Effects of 161
Insanity and insurance, 430; Re-	Lactated food
port on — 579	Lacto-phosphates for uterine fi-
Insomnia, Paraldehyde for 207	broids 739
Insurance and insanity 430	Langenbeck's excision of elbow 46
Intestinal obstruction (See Bowels	Laparotomy (see Enterotomy, and
obstructed), Laparotomy for, 662;	also <i>Ophorectomy</i>) for results of
Intestine wounded	inflammations, 42; — for mesenteric tumor, 172; Case of —, 199;
Intoxication. See Alcoholism.	- for hernia, 317; Antiseptic for
Intubation (see also Tubing), 33;	-, 342; - versus craniotomy,
- and tracheotomy, 217;	463; Statistics of —, 466; — for
tubes 354	ligamentous cyst, 472; — for in-
Intussusception. See Bowels ob-	testinal obstruction, 662; Limits
structed.	of — 761
Iodide of potassium. See Potassium	Laryngology, Advances in, 503; —
Iodiae Sames of	and otology 589
Iodine, Source of	Laryngotomy
for intestinal ulcerations 487	ment of cancer of —, 533
Ipecac and ice-water enemata for	Leprosy and lepers, 265; — in New
dysentery 63	Orleans 500
Iritis, Atmospherie influences in 418	Leucocythæmia cancer of blood 328
Iron, Rio liquid, 375; — and alum	Ligament, Cyst of broad 472
mass, 603; — and alum mass for	Ligaments shortened, Broad and
anal eczema and fissure 883	utero-sacral 149 Ligation of common carotid and
T	subclavian 741
aborandi for snake-bites, etc 432	Lime and soda hypophosphites for
Jaccoud's treatment of typhoid	uterine tumors
fever 25	Lipanin substitute for cod-liver oil, 264
Joint. See Ankle, and also Elbow;	Lithæmia, Buffalo Lithia Water in, 524
Hip —, see Hip joint.	Lithia Springs, Buffalo, 77; Buffalo
Y	- water solvent for uric acid,
Journalistic:	661; Buffalo — water in lithæmia, 524
Archives of Gynæcology	Lithotomy, Cases of supra pubic, 193; Vaginal — 422
International Journal of Surgery and An-	Liver, Cancer of, 383; Left — lobe
tiseptics	removed, 339; Echinococcus of -, 828
Journal of Ophthalmology, Otology and	Localization of brain diseases 707
Laryngology 601 Littell's Living Age 680 Medical Classics 307 Medical Classics 307	Lockjaw. See Tetanus.
Medical Classics	London hospitals 102
Medical Classics	Lungs, Bleeding from. See Hæmop-
Northeast Virginia Medical Society, Jour-	tysis.
nal of 75	Lymphangoitis, Heat for
Scientific American	nymphangorus, meat for 850
	M
K : da = 1 - 1 - 1 - 1 - 1 - 1 - 1	Wagnesia silicate. See Talc.
Aidney (see Nephritis, and also	Malaria causes abortion, 359; Mi-
Peri-nephritic), Cystic, 45; Sar- coma of —, 428; Diagnosis of —	crobe of — discovered 894
Coma of -, 120, Diagnosis of	Malarial typhoid, see Typho-mala-

rial; Forms of — congestion, 41;	Milk treatment of typhoid fever, 23;
- hæmaturia, 197; Quinine in -	- diet in heart diseases, 831;
hæmaturia, 216; Hyperpyrexia	Manufacture of condensed 856
remarkable in — fever 340	Mind on body, Effect of. 286; —
Malignant diseases. See Cancer.	reading, 39; cure (see also
Malingering, Queer case 386	reading, 39; — cure (see also Hypnotism)275, 338
Mammæ, To prevent fat 824	Monsters. See Teratology.
Marasmus, Hypophosphites for 459	Monstrosity. See Anatomy, double.
Maryland Eye and Ear Infirmary 525	Monuments to doctors 887
Massage with cannon-ball for consti-	Morbilli. See Measles.
pation, 21; - in nervous diseases,	Morning sickness 200
342; — for constipation 654	Morphinic (see Opium) tetanus 1
Mastitis, Treatment of 67	Morphine or chloral hydrate, When? 481
Masturbation in female 299	Morrhuol (see also Cod-liver oil) 487
Materialism in disease 211	Mortality statistics 417
Maternal, but not paternal, twins 216	Moses and other doctors 542
Maxilla, Excision of inferior 35	Mumps, Pilocarpin in 241
Measles, Treatment of, 728; Treat-	Murmurs, Thoracic, 218; Heart —, 350
ment of sore throat of —	Music Vocal to prevent consump-
Meatus urinarius contracted causing	Music, Vocal, to prevent consumption 586
	Myelitis (see also Spinal), Antipy-
Mecca oil for anal eczema, fissure,	rin for meningo 185
Modications Emphasis of 830	Myope 667
Mediastinum, Emphysema of 829	Mysticism in medicine 583
Medical education, Principles of 668	1.7
Medical Examining Board. See	1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1
Society, Board, etc.	ævi painlessly destroyed 301
Medicine, Partial history of, 542; Mysticism in —	Narcosis, Opium. See Opium nar-
Mysticism in — 583	cosis.
Medico-legal condition of alco-	Nasal (see Nose) disease cause of
holism 94	chorea, etc., 140; Large — polyp,
Medullary cancer. See Cancer.	140; Deviations of — septa, 65;
Mellier's peptonic elixir 526	— catarrh 668
Membranous croup (see Diphthe-	Neck fractured without death, 431;
ria) 260	—— by short fall 844
Meningitis, Pseudo, from oxyuria,	Negroes, Curious eye cases in 421
106; - following tubercular tes-	Nephectomy, 347; — for sarcoma 428
tis, 273; Chloroform for cerebro-	Nephritis (see also Bright's dis-
spinal — 672	ease), Scarlatinal 106
Meningo-myelitis, Antipyrin for 185	Nerve pressure, Uses of 904
Menopause, Vagary of 39	Nervous diseases, Massage in. 342;
Menstruation at age of 76 years, 41;	— — sanitarium 376
- after removal of ovary, 242;	Neuralgia of uterus, Antipyrin for,
- produced by hypnotism, 263;	63; Antipyrin for facial —, 185;
Suppression of —, see Amenor-	Ichthyol for - of bones, etc.,
rh α a.	237; — of bladder, 263; Facial —,
Mental integrity, 762; Sulfonal for	see Migraine; Phenacetine for -, 640
— diseases 725	see Migraine; Phenacetine for -, 640 Neurasthemia, Hypophosphites for. 459
Menthol 576	New Orleans mortality rates, 417;
Mercury bichloride, see Corrosive	Leprosy in — —, 500
sublimate; — succinimide, 577;	Nitre, Sweet spirits, and antipyrin
- succinimide for syphilis 819	dangerous 373
Mesenteric tumor, Laparotomy for, 172	Nitrite of amyl. See Amyl nitrite.
Mesentery, Cancer of 381	Nomenclature, Proper names in 826
Metritis, Non-puerperal acute 11	Nose (see also Catarrh, nasal). In-
Microbes and infection. Pathogenic,	struments for diseases of, 590;
573; — of diphtheria isolated,	Diseases of — and pharynx, 607;
892; — of malaria discovered,	Foreign bodies in —, 846
894; — of yellow fever 916	
Midwifery, Antiseptic 60	
Migraine (see also Obstetrics), Anti-	Agnew, Dr. Cornelius Rea80, 306
pyrin for 269	Black Dr. Harvey 563, 604

Bruffey, Dr. John W.	444	Perinephritic abscess 208,	
Galt. Dr. James D	605	/	772
Garnett, Dr. A. Y. P311,	375		279
Gray, Dr. William A	861	Peroneal artery, Surgical branch	31
Lambert, Mr. Jordan W.	861	Peroxide of hydrogen. See Hydro-	
Loving, Dr. Edward Greenley	232	gen peroxide.	
Moore, Dr. William J	231		
Steele, Dr. J M	0	Personals:	
^		Bahnson Dr. Henry F	210
Obstetrics, (see also Labor), Ad-		Bosher, Dr. Louis C Charcot, M	821
vances in, 152; Report on —, 5	587	Charcot, M. Clarkson, Dr. Heary M. Cooper, Dr. William F. Craighill & Co. E. A. Cullen, Dr. Charles R. Dabney, Rev. Robert L. Dantorth Dr. Grace	311
Obstruction of bowels, see Bowels	100	Cooper, Dr William F	684
obstructed; Laparotomy for intes-		Cullen Dr. Charles R	823
	362	Dabney, Rev. Robert L	310
Ocular paralysis	504	Dantorth, Dr. Grace Davis, Dr. W. E. B. Edes, Dr. Robert T. Ford, Dr. DeSaussure	443
	33	Edes, Dr. Robert T	684
Oil, Cod-liver, see Cod-liver oil;	00	Ford, Dr. DeSaussure	860
Mecca —, see Mecca oil; How —		Foster, Dr. Frank P. Hamilton, Dr. John B. Hammond, Dr. Wm. A. 229, 376, 685, Harrison, Mr. Reginald.	229
	168	Hammond, Dr. Wm. A 229, 376, 685.	859
	100	Harrison, Mr. Reginald	19
Oöphorectomy (see also Laparotomy), Year's work in 4	188	James, Dr. M. L. Johnston, Dr. Geo. Ben Liebig Laboratory Chemical Works Com-	310
Ophthalmology, 589; Progress in —, 4		Liebig Laboratory Chemical Works Com-	909
Opium habit, Effects of, 2; Atropia,	120	pany523,	603
digitalis, etc., for — narcosis, 32;	1	pany. 523 Manson, Dr. O. F. Mariani & Co. McGuire, Dr. Hunter. 78, Mellier Drug Co.	79
	189	McGuire, Dr. Hunter	682
Os rigid, Chloral for 4		Mellier Drug Co	782
Otitis media (see also Ear, middle), 2		O'Dwyer, Dr. Joseph Parrish, Dr. James	602
Otology and laryngology 5		Pasteur, M	820
Ovariotomy (see also Battey's, Tait's,	100	Pasteur, M. Pierce, Mr. John W.	307
Laparotomy, Abdominal section,		Parcell, Ladd & Co	521
etc.), Tait's for hystero epilepsy,		Ricketts, Dr. Edwin	20
174; Menstruation after —, 242;	- 1	Reuling, Dr. George Ricketts, Dr. Edwin Robinson & Co., B. A.	521
- at age of 64 years, 642; Suc-		Row, Dr. E. W. Stone, Dr. I. S	684
	374	Stratton, Dr. Thomas E.	441
	128	Taylor, Dr. W. E.	781
	360	Warner & Co Wm R	228
	106	Walten-Doy, Di. Duwalu	000
Ozœna, Hydrogen peroxide for	59	Wertenbaker, Dr. C. P	525
the state of the s		Wolfe, Dr. Bernard	442
D		Dartuggin (and Whoming and th)	
Talmar arch, Surgical branch, 30;		Pertussis (see Whooping-cough), Treatment of422,	830
	362		142
	207	Pharmacists in Virginia, Registered	28
Paralysis and syphilis, 263; - agi-		Pharmacopæia, Universal	
tans, 281; Heart -, 345; Ocular			479
—, E	504	Pharynx, Vegetations in vault of,	TIV
	124	280; — and nose diseases, 607;	
TO 1	315		770
Parotid gland, Anomalous exit	18	Phenacetine, analgesic and anti-	110
Pasteur, His Institute and doctrine. 8	320	thermic, 185; — antipyretic and	
Pastoris styptic 8	328	anti-neuralgic	640
Pathogenic germs and infection &	573		410
Pelvic hæmatocele, Case of. 66; —		Phloro-glucine-vanilline for gastric	110
peritonitis, 279; — cellulitis, etc. 7	732		145
Pepsin, Fairchild's, 72; Miller &			739
Co.'s — pills 8	359	Phosphites, Hypo, in wasting dis-	
Peptonic elix r. Mellier's 5	525		459
	339		576
Perineal section, see Epicystotomy;		Phthisis (see also Tubercular), Eti-	
- abscess	50	ology of,	211
Perineorrhaphy, Tait's 2	248	Phymosis, Reflexes of	
		-	

Pleuritis, Purulent	Piles. See Hæmorrhoids.	Ptomaines of fevers	017
Pilocarpine in mumps			911
Placenta prævia, 341; Frequency of —, 181; Case of —, 346 Plaster-of-Paris treatment of fractures	Pilocarpine in mumps 241	Puerperal fever (see also Septice-	
Placenta prævia, 341; Frequency of —, 181; Case of —, 346 Plaster-of-Paris treatment of fractures		mia) and ervsipelas, 187; — ec-	
Plaster-of-Paris treatment of fractures	Placenta prævia, 341; Frequency	lampsia, see Eclampsia; veratrum	
Plaster-of-Paris treatment of fractures	of, 181; Case of, 346	for - eclampsia, 508; - fever	
Pleuritis, Purulent	Plaster-of-Paris treatment of frac-		
Pleuritis, Purulent			810
Pregnant women. Teatment of			
41; Cases of —, 67; Digitalis in large doses for —, 659; Etiology, contagiousness. etc. of —,		Prolitic Con Committed Videon	400
41; Cases of —, 67; Digitalis in large doses for —, 659; Etiology, contagiousness. etc. of —,			250
large doses for —, 659; Etiology, contagiousness. etc. of —,	04; veratrum for — of children,		
Contagiousness, etc. of —,	41; Cases of -, 67; Digitalis in	Pyrexia, Etiology of	586
Pneumothorax, Sterilized air for			
Poison, Jaborandi for venom	contagiousness. etc. of -, 888		
Poison, Jaborandi for venom	Pneumothorax, Sterilized air for 326	Juack advertisements, Arkansas	
Poisoning. Atropia, see Atropia; Septic —, 186; — by opium, see Opium poisoning; — by cocaine, 359; Chronic cocaine —,		Society on	226
Septic —, 186; — by opium, see Opium poisoning; — by cocaine, 359; Chronic cocaine —,		Ongrantine law of Florida 831	
Opium poisoning; — by cocaine, 359; Chronic cocaine —			
359; Chronic cocaine —,	Ocium maisoning: by cooping		00=
Polypi, harge nasal	of Chairman by cocaine,		905
Polypi, nasal, Effects of	559; Unronic cocaine —, 125		22
Polyuria; Antipyrin for	Polyp, Large nasal., 140		902
Popliteal artery. Surgical branch Post mortem. See Autopsy. Potassium iodide for aneurism	Polypi, nasal, Effects of 60	Quinia, Bibrom-hydrate, 24; Com-	
Popliteal artery. Surgical branch 30 Post mortem. See Autopsy. Potassium iodide for aneurism 212 Pott's disease. See Spondylitts. Pregnancy, Spinal irritation complicating. 43; Aphorisms in —, signs etc., 53; Abnormal —, 55; Disorders of —, 55; Case of phantom —, 142; Electrolysis for extranterine —, 164; Sickness of —, 200; Ingluvin for vomiting of —, 936; Extra-nterine —, 219; Cases of extra-nterine —, 219; Cases of extra-nterine —, 322, 497; Vomiting of —, 463; Albuminuria of —, 463; Albuminuria of —, 463; —, with vesicovaginal fistula and everted bladder ——————————————————————————————————	Polyuria; Autipyrin for 185	parative values of — salts, 258;	
Post mortem. See Autopsy. Potassium iodide for aneurism	Popliteal artery, Surgical branch 30	- causes erythema, urticaria.	
Potassium iodide for aneurism 212 Pott's disease. See Spondylitis. Pregnancy, Spinal irritation complicating. 43; Aphorisms in —, signs etc., 53; Abnormal —, 55; Disorders of —, 55; Case of phantom —, 142; Electrolysis for extrauterine —, 164; Sickness of —, 200; Ingluvin for vomiting of —, 986; Extrauterine —, 219; Cases of extrauterine —, 222, 497; Vomiting of —, 463; Albuminuria of —, 463; —, with vesicovaginal fistula and everted bladder	Post mortem. See Autopsy.		
Pott's disease. See Spondylitis. Pregnancy, Spinal irritation complicating. 43; Aphorisms in —, signs etc., 53; Abnormal —, 55; Disorders of —, 55; Case of phantom —, 142; Electrolysis for extranterine —, 164; Sickness of —, 200; Ingluvin for vomiting of —, 936; Extranterine —, 219; Cases of extranterine —, 222, 497; Vomiting of —, 463; Albuminuria of —, 463; —, with vesicovaginal fistula and everted bladder ——————————————————————————————————			216
Pregnancy, Spinal irritation complicating, 43; Aphorisms in —, signs etc., 53; Abnormal —, 55; Disorders of —, 55; Case of phantom —, 142; Electrolysis for extranterine —, 164; Sickness of —, 200; Ingluvin for vomiting of —, 936; Extranterine —, 219; Cases of extranterine —, 322, 497; Vomiting of —, 463; Albuminuria of —, 463; —, with vesicovaginal fistula and everted bladder			210
cating. 43; Aphorisms in —, signs etc., 53; Abnormal —, 55; Disorders of —, 55; Case of phantom —, 142; Electrolysis for extranterine —, 164; Sickness of —, 200; Ingluvin for vomiting of —, 936; Extranterine —, 219; Cases of extranterine —, 219; Cases of extranterine —, 322, 497; Vomiting of —, 463; Albuminuria of —, 463; Albuminuria of —, 463; —, with vesicovaginal fistula and everted bladder Pregnant women. Treatment of		T)	
etc., 53; Abnormal —, 55; Disorders of —, 55; Case of phantom —, 142; Electrolysis for extranterine —, 164; Sickness of —, 200; Ingluvin for vomiting of —, 936; Extranterine —, 219; Cases of extranterine —, 219; Cases of extranterine —, 322, 497; Vomiting of —, 463; Albuminuria of —, 463; —, with vesicovaginal fistula and everted bladder		Radial arters Sussical branch	20
ders of —, 55; Case of phantom —, 142; Electrolysis for extra- uterine —, 164; Sickness of —, 200; Ingluvin for vomiting of —, 936; Extra-uterine —, 219; Cases of extra-uterine —, 322, 497; Vomiting of —, 463; Albuminu- ria of —, 463; —, with vesico- vaginal fistula and everted blad- der		Dailread anametica	30
-, 142; Electrolysis for extra- uterine -, 164; Sickness of -, 200; Ingluvin for vomiting of -, 936; Extra-uterine -, 219; Cases of extra-uterine -, 322, 497; Vomiting of -, 463; Albuminu- ria of -, 463; -, with vesico- vaginal fistula and everted blad- der			911
nterine —, 164; Sickness of —, 200; Ingluvin for vomiting of —, 936; Extra-uterine —, 219; Cases of extra-uterine —, 322, 497; Vomiting of —, 463; Albuminuria of —, 463; —, with vesicovaginal fistula and everted bladder			
200; Ingluvin for vomiting of —, 936; Extra-nterine —, 219; Cases of extra-uterine —, 322, 497; Vomiting of —, 463; Albuminuria of —, 463; —, with vesicovaginal fistula and everted bladder	-, 142; Electrolysis for extra-		358
200; Ingluvin for vomiting of —, 936; Extra-nterine —, 219; Cases of extra-uterine —, 322, 497; Vomiting of —, 463; Albuminuria of —, 463; —, with vesicovaginal fistula and everted bladder	nterine -, 164; Sickness of -,	Rectocele, Treatment of	772
of extra uterine —, 322, 497; Vomiting of —, 463; Albuminuria of —, 463; —, with vesicovaginal fistula and everted bladder	200; Ingluvin for vomiting of —,	Rectum (-ee also Anus), Dilatation	
of extra uterine —, 322, 497; Vomiting of —, 463; Albuminuria of —, 463; —, with vesicovaginal fistula and everted bladder	936; Extra-uterine —, 219; Cases	of, 426; Cancer of —, 51; Dis-	
ria of —, 463; —, with vesico- vaginal fistula and everted blad- der	of extra uterine -, 322, 497;		506
ria of —, 463; —, with vesico- vaginal fistula and everted blad- der	Vomiting of -, 463; Albuminu-		2:2
vaginal fistula and everted bladder	ria of -, 463: -, with vesico-		16
der			
Pregnant women, Treatment of 588 Rhamnns purshiana. See Cascara Preparatory medical schools 71 sagrada.	3		859
Preparatory medical schools 71 sagrada.			099
Prescription writing, Drachm-grain, 508 naeumatism, ribrin in blood of			007
		Rib, Gunshot fracture of	747
Privileges, Doctors' 273 Richmond health report, 225; -		Richmond health report, 225; -	
	Prize essay offered 683	College Infirmary	229
Profunda artery. Surgical branch 30 Roberts' treatment of spinal dis-	Profunda artery, Surgical branch 30	Roberts' treatment of spinal dis-	
	Pronunciation, Dead 612		574
		Rockbridge Alum Springs	311
			107
phied, 361; Supra-pubic orera		The state of the s	
tion for enlarged —, 445; New		0	
treatment for -, 582; Treatment Jaccharin 5	treelment for 589 . Treetment	Jacobarin	575
	of hypertraphied 766 . Floa		31
of hypertrophied - 766: Flag		Calishum plans	614
of hypertrophied —, 766; Elec- Sænger Cæsarean operation	troiysis for sequences of gonor-	Catal in shows 204	014
trolysis for sequelæa of gonor- Salisbury plans 6	rnœa —, 769	Saioi in rhyme, 384; — in dysen-	450
trolysis for sequelæa of gonor- rhæa, 769 Salol in rhyme, 384; in dysen-	D		456
rhœa —,	Prostatic enlargement, Results and	Sair for skin diseases Common	904
trolysis for sequelæa of gonor- rhœa —,	Prostatic enlargement, Results and treatment		
trolysis for sequelæa of gonor-rhœa —,	Prostatic enlargement, Results and treatment	Sandal wood oil, How obtained	168
trolysis for sequelæa of gonor- rhoea —,	Prostatic enlargement, Results and treatment	Sandal wood oil, How obtained Sanitarium of Dr. W. A. Hammond	$\begin{array}{c} 168 \\ 685 \end{array}$
trolysis for sequelæa of gonor- rhoea —,	Prostatic enlargement, Results and treatment	Sandal wood oil, How obtained Sanitarium of Dr. W. A. Hammond Santonin oxytoxic	168

of larynx:	Sore throat of measles, scarlatina,	
Scarlatinal nephritis, 106; Trea -	etc	892
ment of — sore throat 892		210
Scarlatination suggested in 1851 893	Spectacles. See Eye-glasses.	
Scede's method in treating frac-	Sphincter ani. See Anal and Rec-	
tures 929	tum.	
Schools, Preparatory medical 71	Spinal irritation complicating preg-	
Sciatica, Information wanted, 212;	nancy, 43; - curvature, 44; -	
Sulphur externally for -, 411	cord, see Myelitis; - cord tumor	
Scorpion bite, Heat for 830	removed, 340; Roberts' treatment	
Scrofa 805		574
Carafula 150 . Umanahambitan fan	O-inite of mitae Compat Con Mitae	011
Scrofula, 152; Hypophosphites for	Spirits of nitre, Sweet. See Nitre.	
-, 459		681
Septic poisoning 186	Spondylitis, Treatment of	1:0
Septicæmia (see also Puerperal		684
fever), Puerperal lever without 531		313
fever), Puerperal fever without 531 Septum, Deflected 610	Statistics of New Orleans, Vital	417
Seven Springs Iron and Alum Mass 603	Stearoptine	
Shaking palsy 281	Sterility, Dilatation for	
Shock, Surgical 756	Sterilized air for pneumothorax	326
Sight, Defective from overcrowding,	St. Luke's Home for the Sick	780
62; — impaired by amenorrheea 847	Stomach diseases, Diagnosis of, 204;	
Silicate of magnesia. See Talc.	Diagnosis and treatment of,	
Sinus, Trephining over lateral 745	145; Chlorohydria diagnostic in	
Skin diseases, Common salt for 904	——, 329; Cancer of —,	383
Skull fractured, brain matter lost,	Stone. See Calculus.	
etc 408	Strangulated hernia, Laparotomy	
Slate writing 39	for	317
Smoking, Cigarette 74	Stricture of urethra, 50; Reflexes	
Snake-bite, Treatment of 501	of 279 · Fleetrolysis for -	
Shake bite, freatment of	or -, 272, Electrorysis for -,	
	of -, 272; Electrolysis for -, 347; Treatme ts of -, 356; Electrolysis for urethral -,	
Society, Board, etc, Proceedings:	trolysis for urethral -,	763
Alabama, Medical Association of 943	Strophanthine, Uses of	823
American Medical Association	Strophonthus	261
American Pharmaceutical Association 376	Strophanthus	
Association of Acting-Assistant-Surgeons.	Strychnia for syncope	50
U. S. A		
U. S. A 682 California Medical Examining Board 376	St. Vitus dance. See Chorea.	828
U. S. A. 682 California Medical Examining Board 376 Confederate Medical Association 439	St. Vitus dance. See Chorea. Styptic, Bursa pastoris	828
U. S. A	St. Vitus dance. See Chorea. Styptic, Bursa pastoris Subclavian artery, Surgical branch,	828
U. S. A	St. Vitus dance. See Chorea. Styptic, Bursa pastoris Subclavian artery, Surgical branch, 29; ————————————————————————————————————	
U. S. A. 682 California Medical Examining Board	St. Vitus dance. See Chorea. Styptic, Bursa pastoris Subclavian artery, Surgical branch, 29; — — ligated to cure aortic	828 741
U.S.A. 682 California Medical Examining Board 376 Confederate Medical Association 439 Congress of American Physicians and Surgeons 379, 523 Florida Medical Association 832, 855 Fluvanna Medical Society 76 76 76 76 76 76 76 7	St. Vitus dance. See Chorea. Styptic, Bursa pastoris Subclavian artery, Surgical branch, 29; — — ligated to cure aortic aneurism	741
U. S. A. G82 California Medical Examining Board 376 Confederate Medical Association 439 Congress of American Physicians and Surgeons 379, 523 Florida Medical Association 832, 855 Fluvanna Medical Society 76 Kentucky State Medical Society 443 Louisians State Medical Society 945	St. Vitus dance. See Chorea. Styptic, Bursa pastoris	741 29
U. S. A. G82 California Medical Examining Board 376 Confederate Medical Association 439 Congress of American Physicians and Surgeons 379, 523 Florida Medical Association 832, 855 Fluvanna Medical Society 76 Kentucky State Medical Society 443 Louisians State Medical Society 945	St. Vitus dance. See Chorea. Styptic, Bursa pastoris Subclavian artery, Surgical branch, 29; —— ligated to cure aortic aneurism	741
U. S. A. G82 California Medical Examining Board 376 Confederate Medical Association 439 Congress of American Physicians and Surgeons 379, 523 Florida Medical Association 832, 855 Fluvanna Medical Society 76 Kentucky State Medical Society 443 Louisians State Medical Society 945	St. Vitus dance. See Chorea. Styptic, Bursa pastoris Subclavian artery, Surgical branch, 29; —— ligated to cure aortic aneurism Subscapular artery, Surgical branch Substitution by druggists Succinimide of mercury (see Mer-	741 29 508
U. S. A. G82 California Medical Examining Board 376 Confederate Medical Association 439 Congress of American Physicians and Surgeons 379, 523 Florida Medical Association 832, 855 Fluvanna Medical Society 76 Kentucky State Medical Society 443 Louisians State Medical Society 945	St. Vitus dance. See Chorea. Styptic, Bursa pastoris Subclavian artery, Surgical branch, 29; —— ligated to cure aortic aneurism Subscapular artery, Surgical branch Substitution by druggists Succinimide of mercury (see Mer-	741 29
U. S. A. G82 California Medical Examining Board 376 Confederate Medical Association 439 Congress of American Physicians and Surgeons 379, 523 Florida Medical Association 832, 855 Fluvanna Medical Society 76 Kentucky State Medical Society 443 Louisians State Medical Society 945	St. Vitus dance. See Chorea. Styptic, Bursa pastoris Subclavian artery, Surgical branch, 29; —— ligated to cure aortic aneurism Subscapular artery, Surgical branch Substitution by druggists Succinimide of mercury (see Mercury succinimide)	741 29 508
U. S. A. California Medical Examining Board 376 Confederate Medical Association 439 Congress of American Physicians and Surgeons 379, 523 Florida Medical Association 832, 855 Fluvanna Medical Society 76 Kentucky State Medical Society 443 Louisiana State Medical Society 444 Louisiana State Medical Association 945 Microscopical Society of North Carolina 77 Mississippi State Medical Association 944 Mississippi Valley Medical Association 443 Obstetr cal Society of Philadelphia 488	St. Vitus dance. See Chorea. Styptic, Bursa pastoris Subclavian artery, Surgical branch, 29; — — ligated to cure aortic aneurism Subscapular artery, Surgical branch Substitution by druggists Succinimide of mercury (see Mercury succinimide). Succus alterans for syphilis	741 29 508 577 424
U. S. A. California Medical Examining Board 376 Confederate Medical Association 439 Congress of American Physicians and Surgeons 379, 523 Florida Medical Association 832, 855 Fluvanna Medical Society 76 Kentucky State Medical Society 443 Louisiana State Medical Society 444 Louisiana State Medical Association 945 Microscopical Society of North Carolina 77 Mississippi State Medical Association 944 Mississippi Valley Medical Association 443 Obstetr cal Society of Philadelphia 488	St. Vitus dance. See Chorea. Styptic, Bursa pastoris Subclavian artery, Surgical branch, 29; — — ligated to cure aortic aneurism Subscapular artery, Surgical branch Substitution by druggists Succinimide of mercury (see Mercury succinimide) Succus alterans for syphilis Sugar test, Hylander's	741 29 508
U. S. A. California Medical Examining Board 376 Confederate Medical Association 439 Congress of American Physicians and Surgeons 379, 523 Florida Medical Association 832, 855 Fluvanna Medical Society 76 Kentucky State Medical Society 443 Louisiana State Medical Society 945 Microscopical Society of North Carolina 77 Mississippi State Medical Association 944 Mississippi Valley Medical Association 443 Obstetr cal Society of Philadelphia 488	St. Vitus dance. See Chorea. Styptic, Bursa pastoris Subclavian artery, Surgical branch, 29; — — ligated to cure aortic aneurism Subscapular artery, Surgical branch Substitution by druggists Succinimide of mercury (see Mercury succinimide). Succus alterans for syphilis	741 29 508 577 424
U. S. A. California Medical Examining Board 376 Confederate Medical Association 439 Congress of American Physicians and Surgeons 379, 523 Florida Medical Association 832, 855 Fluvanna Medical Society 76 Kentucky State Medical Society 443 Louisiana State Medical Society 945 Microscopical Society of North Carolina 77 Mississippi State Medical Association 944 Mississippi Valley Medical Association 443 Obstetr cal Society of Philadelphia 488 Quarantine Conference 905 Railway Surgeons, National Association 6, 377 Richmond Medical and Surgical Society,	St. Vitus dance. See Chorea. Styptic, Bursa pastoris	741 29 508 577 424
U. S. A. California Medical Examining Board 376 Confederate Medical Association 439 Congress of American Physicians and Surgeons 379, 523 Florida Medical Association 832, 855 Fluvanna Medical Society 76 Kentucky State Medical Society 443 Louisiana State Medical Society 945 Microscopical Society of North Carolina 77 Mississippi State Medical Association 944 Mississippi Valley Medical Association 443 Obstetr cal Society of Philadelphia 488 Quarantine Conference 905 Railway Surgeons, National Association 6, 377 Richmond Medical and Surgical Society,	St. Vitus dance. See Chorea. Styptic, Bursa pastoris Subclavian artery, Surgical branch, 29; —— ligated to cure aortic aneurism Subscapular artery, Surgical branch Substitution by druggists Succinimide of mercury (see Mercury succinimide)	741 29 508 577 424 404 725
U. S. A. California Medical Examining Board 376 Confederate Medical Association 439 Congress of American Physicians and Surgeons 379, 523 Florida Medical Association 832, 855 Fluvanna Medical Society 76 Kentucky State Medical Society 443 Louisiana State Medical Society 945 Microscopical Society of North Carolina 77 Mississippi State Medical Association 944 Mississippi Valley Medical Association 443 Obstetr cal Society of Philadelphia 488 Quarantine Conference 905 Railway Surgeons, National Association 6, 377 Richmond Medical and Surgical Society,	St. Vitus dance. See Chorea. Styptic, Bursa pastoris Subclavian artery, Surgical branch, 29; — — ligated to cure aortic aneurism Subscapular artery, Surgical branch Substitution by druggists Succinimide of mercury (see Mercury succinimide) Succus alterans for syphilis Sugar test, Hylander's Sulfonal, Chemistry and uses, 404; — in mental diseases Sulphur externally for sciatica	741 29 508 577 424 404
U. S. A. California Medical Examining Board 376 Confederate Medical Association 439 Congress of American Physicians and Surgeons 379, 523 Florida Medical Association 832, 855 Fluvanna Medical Society 76 Kentucky State Medical Society 443 Louisiana State Medical Society 945 Microscopical Society of North Carolina 77 Mississippi State Medical Association 944 Mississippi Valley Medical Association 443 Obstetr cal Society of Philadelphia 488 Quarantine Conference 905 Railway Surgeons, National Association 6, 377 Richmond Medical and Surgical Society,	St. Vitus dance. See Chorea. Styptic, Bursa pastoris Subclavian artery, Surgical branch, 29; — — ligated to cure aortic aneurism Subscapular artery, Surgical branch Substitution by druggists Succinimide of mercury (see Mercury succinimide). Succus alterans for syphilis Sulfonal, Chemistry and uses, 404; — in mental diseases Sulphur externally for sciatica Summer complaint. See Cholera	741 29 508 577 424 404 725
U. S. A. California Medical Examining Board 376 Confederate Medical Association 439 Congress of American Physicians and Surgeons 379, 523 Florida Medical Association 832, 855 Fluvanna Medical Society 76 Kentucky State Medical Society 443 Louisiana State Medical Society 945 Microscopical Society of North Carolina 77 Mississippi State Medical Association 944 Mississippi Valley Medical Association 443 Obstetr cal Society of Philadelphia 488 Quarantine Conference 905 Railway Surgeons, National Association 6, 377 Richmond Medical and Surgical Society,	St. Vitus dance. See Chorea. Styptic, Bursa pastoris Subclavian artery, Surgical branch, 29; — — ligated to cure aortic aneurism Subscapular artery, Surgical branch Substitution by druggists Succinimide of mercury (see Mercury succinimide) Succus alterans for syphilis Sugar test, Hylander's Sulfonal, Chemistry and uses, 404; — in mental diseases Sulphur externally for sciatica	741 29 508 577 424 404 725
U. S. A. California Medical Examining Board 376 Confederate Medical Association 439 Congress of American Physicians and Surgeons 379, 523 Florida Medical Association 832, 855 Fluvanna Medical Society 76 Kentucky State Medical Society 443 Louisiana State Medical Society 945 Microscopical Society of North Carolina 77 Mississippi State Medical Association 944 Mississippi Valley Medical Association 443 Obstetr cal Society of Philadelphia 488 Quarantine Conference 905 Railway Surgeons, National Association 6, 377 Richmond Medical and Surgical Society,	St. Vitus dance. See Chorea. Styptic, Bursa pastoris Subclavian artery, Surgical branch, 29; — — ligated to cure aortic aneurism Subscapular artery, Surgical branch Substitution by druggists Succinimide of mercury (see Mercury succinimide) Succus alterans for syphilis Sugar test, Hylander's Sulfonal, Chemistry and uses, 404; — in mental diseases Sulphur externally for sciatica Summer complaint. See Cholera infantum.	741 29 508 577 424 404 725
U. S. A. California Medical Examining Board 376 Confederate Medical Association 439 Congress of American Physicians and Surgeons 379, 523 Florida Medical Association 832, 855 Fluvanna Medical Society 76 Kentucky State Medical Society 443 Louisiana State Medical Society 945 Microscopical Society of North Carolina 77 Mississippi State Medical Association 944 Mississippi Valley Medical Association 443 Obstetr cal Society of Philadelphia 488 Quarantine Conference 905 Railway Surgeons, National Association 6, 377 Richmond Medical and Surgical Society,	St. Vitus dance. See Chorea. Styptic, Bursa pastoris	741 29 508 577 424 404 725 411
U.S.A. G82 California Medical Examining Board 376 Confederate Medical Association 439 Congress of American Physicians and Surgeons 379, 523 Florida Medical Association 832, 855 Fluvanna Medical Society 443 Louisiana State Medical Society 443 Louisiana State Medical Society 945 Microscopical Society of North Carolina 77 Mississippi Valley Medical Association 443 Obstetr cal Society of Philadelphia 488 Quarantine Conference 905 Railway Surgeons, National Association 5, 377 Richmond Medical and Surgical Society, 183, 193, 775 South Carolina Medical Association 944 Southern Surgical and Gynæcological Association	St. Vitus dance. See Chorea. Styptic, Bursa pastoris Subclavian artery, Surgical branch, 29; — — ligated to cure aortic aneurism Subscapular artery, Surgical branch Substitution by druggists Succinimide of mercury (see Mercury succinimide) Succus alterans for syphilis Sugar test, Hylander's Sulfonal, Chemistry and uses, 404; — in mental diseases Sulphur externally for sciatica Summer complaint. See Cholera infantum. Superstition Supra-pubic lithotomy, Cases of,	741 29 508 577 424 404 725 411
U.S.A. G82 California Medical Examining Board 376 Confederate Medical Association 439 Congress of American Physicians and Surgeons 379, 523 Florida Medical Association 832, 855 Fluvanna Medical Society 443 Louisiana State Medical Society 443 Louisiana State Medical Society 945 Microscopical Society of North Carolina 77 Mississippi Valley Medical Association 443 Obstetr cal Society of Philadelphia 488 Quarantine Conference 905 Railway Surgeons, National Association 5, 377 Richmond Medical and Surgical Society, 183, 193, 775 South Carolina Medical Association 944 Southern Surgical and Gynæcological Association	St. Vitus dance. See Chorea. Styptic, Bursa pastoris Subclavian artery, Surgical branch, 29; — — ligated to cure aortic aneurism Subscapular artery, Surgical branch Substitution by druggists Succinimide of mercury (see Mercury succinimide). Succus alterans for syphilis Sugar test, Hylander's Sulfonal, Chemistry and uses, 404; — in mental diseases Sulphur externally for sciatica Summer complaint. See Cholera infantum. Superstition Supra-pubic lithotomy, Cases of, 193; — operation for enlarged	741 29 508 577 424 404 725 411
U.S.A. G82 California Medical Examining Board 376 Confederate Medical Association 439 Congress of American Physicians and Surgeons 379, 523 Florida Medical Association 832, 855 Fluvanna Medical Society 443 Louisiana State Medical Society 443 Louisiana State Medical Society 945 Microscopical Society of North Carolina 77 Mississippi Valley Medical Association 443 Obstetr cal Society of Philadelphia 488 Quarantine Conference 905 Railway Surgeons, National Association 57 Richmond Medical and Surgical Society 77 South Carolina Medical Association 944 Southern Surgical and Surgical Society 945 Virginia Board of Pharmacy 947 Virginia, Medical Examining Board of 73, 108, 181, 378, 519, 525, 555, 572, 659 773, 775, 857, 858, 897, 938, 940 Virginia, Medical Society of 93, 374, 438, 516, 541, 599 Virginia Pharmaceutical Association 949 Virginia Pharmaceutical Association 191	St. Vitus dance. See Chorea. Styptic, Bursa pastoris	741 29 508 577 424 404 725 411
U.S.A. G82 California Medical Examining Board 376 Confederate Medical Association 439 Congress of American Physicians and Surgeons 379, 523 Florida Medical Association 832, 855 Fluvanna Medical Society 443 Louisiana State Medical Society 443 Louisiana State Medical Society 945 Microscopical Society of North Carolina 77 Mississippi Valley Medical Association 443 Obstetr cal Society of Philadelphia 488 Quarantine Conference 905 Railway Surgeons, National Association 57 Richmond Medical and Surgical Society 77 South Carolina Medical Association 944 Southern Surgical and Surgical Society 945 Virginia Board of Pharmacy 947 Virginia, Medical Examining Board of 73, 108, 181, 378, 519, 525, 555, 572, 659 773, 775, 857, 858, 897, 938, 940 Virginia, Medical Society of 93, 374, 438, 516, 541, 599 Virginia Pharmaceutical Association 949 Virginia Pharmaceutical Association 191	St. Vitus dance. See Chorea. Styptic, Bursa pastoris	741 29 508 577 424 404 725 411
U.S.A. G82 California Medical Examining Board 376 Confederate Medical Association 439 Congress of American Physicians and Surgeons 379, 523 Florida Medical Association 832, 855 Fluvanna Medical Society 443 Louisiana State Medical Society 443 Louisiana State Medical Society 945 Microscopical Society of North Carolina 77 Mississippi Valley Medical Association 443 Obstetr cal Society of Philadelphia 488 Quarantine Conference 905 Railway Surgeons, National Association 5, 377 Richmond Medical and Surgical Society, 183, 193, 775 South Carolina Medical Association 944 Southern Surgical and Gynæcological Association	St. Vitus dance. See Chorea. Styptic, Bursa pastoris	741 29 508 577 424 404 725 411
U.S.A. 2016 Orange of Section 1.	St. Vitus dance. See Chorea. Styptic, Bursa pastoris	741 29 508 577 424 404 725 411
U.S.A. California Medical Examining Board 376 Confederate Medical Association 439 Congress of American Physicians and Surgeons 379, 523 Florida Medical Association 822, 855 Fluvanna Medical Society 776 Kentucky State Medical Society 443 Louisiana State Medical Society 945 Microscopical Society of North Carolina 77 Mississippi Valley Medical Association 443 Obstetr cal Society of Philadelphia 488 Quarantine Conference 905 Railway Surgeons, National Association 6, 377 Richmond Medical and Surgical Society, 948 South Carolina Medical Association 944 Southern Surgical and Gynæcological Association	St. Vitus dance. See Chorea. Styptic, Bursa pastoris	7411 29 508 577 424 404 725 411 286
U.S.A. (682 California Medical Examining Board 376 Confederate Medical Association 439 Congress of American Physicians and Surgeons 379, 523 Florida Medical Association 632, 855 Fluvanna Medical Society 443 Louisiana State Medical Society 945 Microscopical Society of North Carolina 77 Mississippi Valley Medical Association 443 Obstetr cal Society of Philadelphia 488 Quarantine Conference 905 Rallway Surgeons, National Association 63, 377 Richmond Medical and Surgical Society 183, 193, 775 South Carolina Medical Association 944 Southern Surgical and Gynæcological Association 945 Virginia Board of Pharmacy 27 Virginia, Medical Examining Board of 73, 108, 181, 378, 519, 525, 555, 572, 659, 773, 775, 857, 858, 897, 938, 940 Virginia, Medical Society of 948, 193, 194, 181, 194, 181, 195, 374, 438, 516, 541, 599 Virginia Pharmaceutical Association 191 W*shington Obstetrical Society 602 Society fever 841 Soda and lime hypophosphites for	St. Vitus dance. See Chorea. Styptic, Bursa pastoris	7411 29 508 577 424 404 725 411 286 567
U.S.A. California Medical Examining Board 376 Confederate Medical Association 439 Congress of American Physicians and Surgeons 379, 523 Florida Medical Association 822, 855 Fluvanna Medical Society 776 Kentucky State Medical Society 443 Louisiana State Medical Society 945 Microscopical Society of North Carolina 77 Mississippi Valley Medical Association 443 Obstetr cal Society of Philadelphia 488 Quarantine Conference 905 Railway Surgeons, National Association 6, 377 Richmond Medical and Surgical Society, 948 South Carolina Medical Association 944 Southern Surgical and Gynæcological Association	St. Vitus dance. See Chorea. Styptic, Bursa pastoris	7411 29 508 577 424 404 725 411 286
U. S. A. California Medical Examining Board 376 Confederate Medical Association 439 Congress of American Physicians and Surgeons 379, 523 Florida Medical Association 832, 855 Fluvanna Medical Society 97 Kentucky State Medical Society 443 Louisiana State Medical Society 943 Microscopical Society of North Carolina 77 Mississippi Valley Medical Association 944 Mississippi Valley Medical Association 443 Obstetr cal Society of Philadelphia 488 Quarantine Conference 905 Railway Surgeons, National Association 97 Richmond Medical and Surgical Society, 183, 193, 775 South Carolina Medical Association 944 Southern Surgical and Surgical Society, 183, 193, 775 South Carolina Medical Association 944 Virginia Board of Pharmacy 27 Virginia, Medical Examining Board of, 73, 108, 181, 378, 519, 525, 555, 572, 659, 773, 108, 181, 378, 519, 525, 555, 572, 659, 193, 194 Virginia, Medical Society of 193, 374, 438, 516, 541, 599 Virginia Pharmaceutical Association 602 Society fever 841 Soda and lime hypophosphites for uterine tumors 738	St. Vitus dance. See Chorea. Styptic, Bursa pastoris Subclavian artery, Surgical branch, 29; — — ligated to cure aortic aneurism Subscapular artery, Surgical branch Substitution by druggists Succinimide of mercury (see Mercury succinimide) Succus alterans for syphilis Sulfonal, Chemistry and uses, 404; — in mental diseases Sulphur externally for sciatica Summer complaint. See Cholera infantum. Superstition Supra-pubic lithotomy, Cases of, 193; — operation for enlarged prostate, 445; Artificial — urethra Surgery for country doctors, Antiseptic, 733; Aphorisms of aseptic and antiseptic —, 740; — of brain Surgical branches of arteries	741 29 508 577 424 404 725 411 286 567 7444 29
U.S.A. (682 California Medical Examining Board 376 Confederate Medical Association 439 Congress of American Physicians and Surgeons 379, 523 Florida Medical Association 632, 855 Fluvanna Medical Society 443 Louisiana State Medical Society 945 Microscopical Society of North Carolina 77 Mississippi Valley Medical Association 443 Obstetr cal Society of Philadelphia 488 Quarantine Conference 905 Rallway Surgeons, National Association 63, 377 Richmond Medical and Surgical Society 183, 193, 775 South Carolina Medical Association 944 Southern Surgical and Gynæcological Association 945 Virginia Board of Pharmacy 27 Virginia, Medical Examining Board of 73, 108, 181, 378, 519, 525, 555, 572, 659, 773, 775, 857, 858, 897, 938, 940 Virginia, Medical Society of 948, 193, 194, 181, 194, 181, 195, 374, 438, 516, 541, 599 Virginia Pharmaceutical Association 191 W*shington Obstetrical Society 602 Society fever 841 Soda and lime hypophosphites for	St. Vitus dance. See Chorea. Styptic, Bursa pastoris	741 29 508 577 424 404 725 411 286 567 7444 29

Syncope, Atropia and strychila for, 50	Trephining for brain diseases, 705;	
Synonyms of diseases with proper	— over sinus	743
names 826	Trip-hammer heart-beats	882
Syphilis (see also Chancre) diag-	Tripod of life	343
nosed from psoriasis. 40; How -	Trophopathy in heart diseases	863
is communicated, 194; Peculiar	Tubercular (see also Phthisis) in-	
complications of —, 196; Com-	fection, 263; testis followed	
municability of — limited, 201; Chronic —, 214; — and paraly	by meningitis, 273; arthritis	392
Chronic —, 214; — and paraly	Tuberculosis (see also Consumption),	
sis, 263; Succus alterans for -,	Contagion of, 185; — of larynx,	
424; Ulcero-puetular — of larynx,	484; Is — hereditary?	800
484; Mercury succinimide for —, 819	Tuberculous infection	724
	Tubing substitute for tracheotomy	22
T	Tumor of mesentery, see Mesen-	
1 ait's operation (see also Ovari-	teric; - of uterus, see Uterine	
otomy) for hystero epilepsy, 174;	fibroids; — of ovary, see Ovary.	
- perineorrhaphy 248	Tumors, Classification of, 278; Med-	
Tale for diarrhæa 488	_ ical treatment of uterine -,	736
Talipes, Etiology and treatment 37	Turpentine, Chian. See Chian tur-	
Teeth extracted painlessly 674	pentine.	
Teratology 214	Twins by different fathers	216
Testes in ablation of penis, What to	Tympanites, Quincke's tube for	902
do with 845	Typhoid fever, Treatment of, 23,	
Testicle, Cancer of 381	171; Management of — -, 87; -	
Testis, Tubercular, followed by men-	in children, 153; Carbolic acid	
ingitis 273	for, 348; Coffee in,	
Tetanin, Formula of 10	350; Complications and treatment	
Tetanus, Morphinic, 1: Etiology	of, 410; Dietetics in,	
Tetanus, Morphinic, 1; Etiology and treatment of —, 9; Treat-	_ 506; Atypical forms of,.545,	655
ment of -, 138; Etiology of -,	Typho-malarial tever 480, 546,	652
188; Equine origin of —, 266;	-51	
Recovery from -, 272, 475; Pa-	TT .	
thology of and tobacco for -,	lcer of bladder, Perforating, 344;	
419; — bacillus found, 724; Con-		358
tagiousness of —, 817	Ulcerations, Intestinal, Iodoform	000
Texas insane, Management of199, 507		487
Thoracic murmurs 218	Ulnar artery, Surgical branch	30
Throat (see also Pharynx), Instru-	Urachus open in adults, Cases of	
ments for diseases of, 590; Recov-	Urethra, Gonorrhœa, Electrolysis	200
erv from — cut 770	of prostate, 769; What to do with	
ery from — cut 770 Thrombi (see also <i>Heart-clot</i>) in		845
heart 867	Urethral stricture, see Stricture, and	
Thuya occidentalis for cancer 539	also Stricture of urethra; Lecture	
Tibial artery, Surgical branch 30	on - fever, 687; Electrolysis for	
Tobacco smoking, 74. — oil for tet-		763
anus, 419; — amblyopia 422	TT 1	576
Tongalline in dengue, 302; — for	TT 1 T 1 C 1	673
neuralgia 532	Uric acid diathesis, see Lithmica;	0.0
Tongue resected for epithelioma, 98;	Buffalo Lithia Water for — —	
— in health and disease 797		661
Tonsillitis, Hydrogen peroxide for, 59		272
Tonsils enlarged, Treatment of 589	Urine, Bloody, see Hæmaturia;	
Toxic See Poisoning.		728
Tracheotomy (see also Bronchotomy),	Urticaria due to quinia	423
Tubing substitute for, 22; — and	Uterine (see Uterus) neuralgia, An-	
intubation 217	tipyrin for, 63; — cervix, see Cer-	
Trachoma, Treatment of 36	vix uteri; Treatment of — fibroids,	
Translations from French, 23, 145,		429
184; — from German21, 106, 188	Utero-sacral ligaments shortened	
Treatment, Expediency in 200	Uterus, Inflammation of, see Me-	
Tremblings, Nerve pressure for 904	tritis; Hydrogen peroxide for	
Trephine for epilepsy 715	cancer of —, 59; Recovery from	
Trebuine for chirchely,	, , , , , , , , , , , , , , , , , , , ,	

ruptured —, 107; Fibroid of —, 247; Double —, 278; Medical treatment of — tumors, 736; Hysterectomy for cancer of —,		Volvulus, Ilium attached in Vomiting of pregnancy, Treatment, 463; Ingluvin for — — —,	
751; Epicystotomy for fibroid of	753	Warts, Treatment of	815 659
V aginal lithotomy, 422; — hysterectomy	751 670	Whooping cough, Hydrogen-perox- ide for	179 59
Vanilline, Phloro glucine, for gas- tric diagnosis, 145; Glucine — in stomach diseases		Wire-woven corset for spinal diseases	574
Venomous bites, etc., Jaborandi for, 432; Treatment of — sting or snake-bite		Womb. See <i>Uterus</i> . Wound of intestine, 357; Antiseptics for surgeon's —, 392; Death	
Veratrum for children's pneumonia, 41; — viride in puerperal convul- sions, 431; — viride in puerperal		nine months after — of abdomen, 498; Gunshot — of hip-joint Wounds treated with quebracho,	810
Verteb æ fractured without death, 431; Gunshot fracture of —, 748;	508	22; Gunshot —,	747
Cervical —, see also Neck. Vertebral artery, Surgical branch Vesico-vaginal fistula, Rare case of.		Y ellow fever epidemic in the South, 518; — — in Florida, 580; Pro- tection against — —, 649; Cause	
Viburnum compound, Hayden's Vin Mariani, 782; — for vocal failure	374497	of — —, 671; — — microbe, 917; — — quarantine	906
Vision. See Sight. Visiting list, Medical News, 686; Lindsay & Blakiston's — —, Voice, Vin Mariani for	686	Zinc chloride in cancer, etc Zymotic diseases, Protection against	

